DEMOCRACY AND HUMAN DEVELOPMENT: A CRITICAL EMPIRICAL INVESTIGATION USING DATA FROM 123 COUNTRIES, 1970-1990

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ABSTRACT

Although much has been written about the general relationship between democracy and development since the end of the Second World War, a common consensus has not emerged to explain the various facets of this relationship. Originally defined in purely economic terms, only recently has the concept of development been broadened to include the most vital non-economic components under the umbrella of 'human development'. Indeed, the UNDP's first Human Development Report (1990) proposed that human development should serve as the yardstick with which to measure the progress of nations. Influenced by the post-Cold War euphoria, the accompanying political argument, propagated by many international bodies (including the World Bank and the UNDP), Western policy-makers and development planners, held that democracy and human development are mutually complementary phenomena. To date, however, the empirical basis for this view has not been established.

Using data from 123 countries for the 1970-90 period, this thesis represents an extensive cross-national, time-series investigation into the nature of the relationship between democracy and human development. It will be argued that there are in fact two relationships to be established, one between democracy and *levels* of human development and one between democracy and human development *performance*. This leads to the fundamental question: Is democracy typically the by-product of development, the catalyst for development, or neither? To answer this, the records of democratic and non-democratic states will be evaluated and compared using many different analytical techniques, sample groups and controlling variables.

This thesis will also examine other important related concerns, including the triangular relationship between democracy, human development and economic growth, and the political basis of the best-performing case studies, or 'developmental states'. Several new empirical measures have been constructed specifically for the purposes of this research, including a new measure of democracy, the Level of Democracy index (LoD), and a new and more comprehensive measure of human development, the Integrated Human Development Index (I-HDI).

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Abbreviations

%NAgr	% Non-Agricultural Employment indicator
AFR	sub-Saharan Africa (regional group)
ASI	Asia (regional group)
CIVIL	Civil Liberties indicator
CONF	Conflict/Peace indicator
FAO	Food and Agricultural Organization
GDP/C	Gross Domestic Product per Capita
GEND	Gender Equity indicator
GNP/C	Gross National Product per Capita
HDI	Human Development Index
HDR	Human Development Report
ID	Index of Democratization
ID(S)	Index of Democratization (scaled)
I-HDI	Integrated Human Development Index
ILO	International Labour Organization
IMF	International Monetary Fund
INC	Income Category
IND	Industrial (regional group)
INFL	Inflation rate indicator
ISC	Index of Social Conditions
LAT	Latin America (regional group)
LIB	Liberty Index
LoD	Level of Democracy (index)
MID	Middle East and North Africa (regional group)
MOB	Mobility Index
OECD	Organization for Economic Cooperation and Development
PPP$	Purchasing Power Parity (US dollars)
PRI	Political Rights Index
SEC	Security Index
SIPRI	Stockholm International Peace Research Institute
SURV	Child Survival indicator
TERT	Tertiary Enrolment indicator
UN	United Nations
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WB	World Bank
WDR	World Development Report
WHO	World Health Organization

CHAPTER 1
INTRODUCTION: DEMOCRACY AND HUMAN DEVELOPMENT

"What is a conducive external environment for human development?"
- 1990 Human Development Report

According to the World Bank, the UNDP and many Western academics and policy-makers, the short *political* answer to the above question is 'democracy'. Indeed, the proposition that democracy and human development are mutually complementary phenomena is seldom challenged. And yet, crucially, the empirical basis for this conclusion has not been sufficiently examined. This thesis will seek to fill this void.

The principal question to be addressed is deceptively straightforward: What is the relationship between democracy and human development? Is democracy typically the by-product of development, the catalyst for development, or neither? In reality, then, there are two relationships to be established: between democracy and *levels* of human development and between democracy and human development *performance*. It is commonly held, in the former case, that countries become more democratic as they become more developed, an argument which stems back to Lipset's influential hypothesis (1959). In the latter case, the prevailing post-Cold War view argues that democracy is also the form of government most capable of improving overall living conditions in any given society.

Using data from 123 countries for the 1970-90 period, this thesis will critically analyze the various facets of the democracy-human development equation. In doing so, an attempt is made to address the problem that "development studies have for too long been excluded from mainstream political science" (Leftwich 1993b: 70). To the best of my knowledge, this thesis represents the first extensive cross-national, time-series study comparing variations in human development levels and performance across political systems.

1.1 Points of Departure: The Emergence of Human Development

There is a broad similarity in the patterns by which human development emerged as a central concept in both political science and development studies.[1] The beginning of its popularity in each discipline may be traced back to the same period, from the mid-1960s to the early 1970s, when the concept was embraced by its supporters (political humanists and basic needs advocates) as the only morally-justifiable alternative to the perceived 'value-free', dominant approaches of the day (the political development school and the growth , later to be called neo-liberal, paradigm). Over the course of the next two decades, basic needs advocates were more successful than political humanists in making an imprint, arguably because they backed their arguments with concrete, empirical evidence, while political humanists continued to focus on theoretical propositions. Nonetheless, the publication of the UNDP's first Human Development Report in 1990 effectively placed the seal of approval on the concept of human development as a tool of analysis in both disciplines.

Human Development and Comparative Politics

The idea of placing human development at the forefront of comparative politics is certainly not new. Aristotle himself had claimed that one should assess "the 'difference between a good political arrangement and a bad one' in terms of its success and failure in facilitating people's ability to lead 'flourishing lives'" (quoted in UNDP 1990: 9). This argument was taken up in the 1960s by a normative political tradition which postulated that: "all politics exists for the purpose of progressively removing the most stultifying obstacles to a free human development" (Bay 1965: 50). Since it serves as the theoretical inspiration behind this thesis, the 'humanist' approach will be considered in detail in Chapter 2. Suffice it to note here that, in a direct challenge to theorists of political development, who focused almost exclusively on the issues of democratization and institutionalization, a new perspective was offered based on the precepts outlined in Christian Bay's celebrated passage:

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[1]My own specific interpretation of human development will be outlined during the construction of the indices in Chapter 3. However, conventional definitions are plentiful. One study suggests that: "it is about whether people live and die, whether people eat well, are malnourished or starve...whether their conditions of work are tough and unpleasant, whether people have access to work at all, whether people control their political lives, whether they have the education to be full members of society with some control over their destiny" (Griffin and Knight 1990: 10). Along a similar vein, the UNDP (1990: 1) argues that: "human development is a process of enlarging people's choices. The most critical of these wide-ranging choices are to live a long and healthy life, to be educated and to have access to the resources needed for a decent standard of living".

> ...the only acceptable justification of government, which also determines the limit to its legitimate authority, is its task of serving human needs - serving them better than would be done without any government. The only justification of a particular form of government, which again also determines the limits on its legitimate demands on the individual's obedience and loyalty, is that it serves to meet human needs better than other forms of government (Bay 1968: 241).

By the late 1970s this perspective had gained considerable currency among disaffected academic groups such as the Caucus for a New Political Science, which argued quite simply that: "We need a different set of standards for judging regimes" (Fitzgerald 1977a: xiv). But only recently, however, has a broader consensus evolved around the value of the concept of human development for political analysis. Why this apparent delay of some two decades?

One reason is ideological impasse: all too often, any talk of 'human needs' and 'improving the human condition' was dismissed by writers on the Right as concealing a call for socialist revolution, whereas notions of 'individual responsibility' and 'capability' were derided by writers on the Left as euphemisms for market forces (Fitzgerald 1977a; Doyal and Gough 1984). Instead of evaluating political performance on the basis of *actual* living conditions, which requires an empirical investigation, many writers simply engaged in a purely theoretical debate over the desirability of different institutional structures and mechanisms (democratic or socialist):

> Among the social sciences, political science has...been relatively slow to develop empirical knowledge applicable to problems of *ends and means*....(Writers) have for many centuries been concerned principally with thought about how a society *ought* to be governed and have neglected the empirical study of how existing societies *actually are* governed (Bay 1970: 4-5).

A second reason for this past neglect had to do with the fact that, even had the desire been there to undertake empirical investigations on any significant scale, researchers were hampered by wholly inadequate and insufficient data. While economic indicators - namely GDP/GNP per capita - were largely available in cross-national, time-series formats, only a few basic social indicators (life expectancy, infant mortality, literacy, etc) were available and reliable. Although Morris introduced his Physical Quality of Life Index (PQLI) in the late 1970s, its limitations (Chapter 3) ensured that no composite measure of well-being succeeded in truly capturing the attention of the academic world until the appearance of the UNDP's Human Development Index (HDI) in 1990.

The publication of the first Human Development Report had a profound and immediate impact on virtually every discipline in the social sciences. The seminal role of politics was highlighted in particular by the UNDP: "the lack of political commitment, not financial resources, is often the real cause of human neglect" (UNDP 1991: 1). From this basic premise there followed several pertinent questions requiring further research: Does

democracy suggest that "influence does not require affluence... for it is a valuable ally to all" (UNDP 1991: 8)?; or is it true that "the right to vote...is of less value to someone who is starving or illiterate...(so that) political democracy will be fragile until basic economic (and social) rights are guaranteed" (UNDP 1992: 29)?

The introduction of the HDI coincided with a renewed interest in adopting human development as a normative standard of evaluation and comparison (Andrain 1994; Blondel 1995; Diamond 1992; Goulet 1995; Lane and Ersson 1993, 1994; Leftwich 1990; Mayer 1989; Monshipouri 1995; Schmitz and Gilles 1992; Smith 1996; Sorensen 1993b; Weede 1993). Mayer (1989: 22), for one, claims that it is time for political scientists to "prescribe what should be (in terms of) humanistic values". Blondel (1995: 60) asks rhetorically whether one could not "consider as 'inalienable' and universally 'valuable' the right to strive, the right to achieve, a view which is perhaps not too far from the right to 'happiness'"? And Leftwich (1990: 100) urges us to contribute to:

> ...the great tradition of enquiry into the fundamental issue of all politics in its inextractible and interdisciplinary involvement in the economic and social affairs of society: how, as human beings, do we live together and how might we do so, while seeking simultaneously to promote the collective welfare of all and the individual fulfillment and potential of each?

The case for making human development the cornerstone of a new comparative politics is self-evident. Meaningful cross-national comparisons can only be made if performance is evaluated against normative criteria which are, above all, morally compelling and universal. As Doyal and Gough (1984: 9) correctly point out: "unless there is some yardstick - some common denominator which all people share - which can be employed to assess the success of particular social practices, then any notion of social progress is itself thrown into question". The *only* such universally-accepted yardstick is human development (Goulet 1968; Park 1984; McGranahan et al 1985). And as a universal goal, human development satisfies the essential conditions of being ideologically- and culturally-objective (Wiarda 1985a: 8). Every ideology explicitly or implicitly accepts the UNDP's argument for the need to "create an enabling environment for people to enjoy long, healthy and creative lives" (UNDP 1990: 7). Nor is the concept of human development confined to one particular cultural tradition, for despite "the diversity of goals across cultures, people require certain physical and mental capacities in common to pursue any goals at all" (Miles 1985: 164).

If human development is the 'end', politics is the 'means'. This argument, the essence of the humanist message, implies that democracy, like all forms of government, has an instrumental role to fulfil which is quite independent of whatever intrinsic value it may have for societies at different stages of development (Chapter 2). In a passage that reflects the extent to which contemporary political science has borrowed some of the very terminology used by the UNDP, Schmitz and Gilles (1992: xiv) argue that:

> Democracy...is judged in the final analysis by how it gets things done and how well it is able to serve the common good...The developmental potential of democracy lies in its capacity to expand the range of human possibilities and choices, to benefit people as persons and as members of communities - in general, to improve the human condition.

Unlike the earlier political humanists, whose lack of any empirical dimension largely sidelined their theoretical efforts, contemporary researchers now have the means to bridge the gap between theory and practice. Although the HDI is (essentially) a credible tool of comparison, this paper will show that it is, upon close inspection, insufficient for the task at hand (Chapter 3).

Human Development as the Key Developmental Objective

At roughly the same time that political humanists were stating their case, disillusioned writers in the interdisciplinary field of development studies started to ask: "What are the necessary conditions for a universally acceptable aim, the realization of the human personality" (Seers 1972: 22)? A new approach subsequently emerged arguing that "human beings themselves should be the end to which economic development, political development and social changes are the means" (Miles 1985: 152). What matters is not necessarily how quickly GNP is growing, but to what extent people's lives are improving:

> The goals of development are the goals of existence itself: to provide an opportunity for (individuals) to live fully human lives. In other words, development is good if it helps individuals live the good life and accelerates the advent of the 'good society' (Goulet 1968: 308).

There has always been an underlying tension between the developmental goals of economic growth and human development. Indeed, up until a decade ago a debate raged within development circles over the priority to be assigned to each. What should come first, economic growth or human development? In an ideal world, proponents of each position would argue, both could be achieved. But since the attainment of each goal appeared to require the adoption of altogether different strategies and policies (growth-oriented or basic needs-oriented), initial efforts and resources would have to be channeled towards the promotion of one or the other. Two distinctive schools of thought therefore emerged.[2]

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[2]Some focus on more than two general approaches. Goulet (1995: 85-89) describes four "pathways to development": (1) growth; (2) redistribution with growth; (3) basic human needs; and (4) development from tradition. Approaches (1) and (3) will be looked at specifically. Approach (2) is to some extent a mixture of (1) and (3), in that part of the wealth accumulated from growth is invested back into 'human capital' via expenditures on health and education (although the poor are not specifically targeted). Approach (4) is found more on the fringes of academic discourse. This paradigm holds that "the goals of a form of development suited to a particular society should be sought from within the latent dynamism of that society's value system - its traditional beliefs, (and) its meaning system..." (ibid: 89).

The growth (or neo-liberal) paradigm is quite familiar and straightforward. Counting the IMF and World Bank as its chief proponents, it holds that the creation of conditions required for sustained economic growth should be the immediate developmental objective, for as a society enriches itself materially, the benefits of the new-found prosperity will eventually *trickle down* to wider segments of the population. The following passage from the 1987 World Development Report summarizes this position:

> A fundamental goal of long-term economic development is to improve the welfare of the poor. The evidence suggests that in the long term, in most cases, the benefits of economic growth are dispersed throughout society and reach its poorest members...Such improvements for the poor would not be instantaneous (World Bank 1987a: 59, Box 4.1).

The central message that 'everyone benefits, but not right away' implies a trade-off: "the conventional wisdom among industrial countries as well as policy-makers in developing countries has been that things ought to be done 'one at a time': first, economic growth; second, social equity; third, civil and political liberties" (World Bank 1991a: 137).

In contrast, the 'basic needs approach' (BNA),[3] with its emphasis on non-economic measures of development, foreshadowed contemporary interest in the concept of human development (Desai 1991: 352). In his Report to the World Employment Conference of 1976, an event credited with giving the BNA its initial impetus (Weigel 1989),[4] the Director-General of the ILO lamented that:

> Contrary to earlier expectations, the experience of the past two decades has shown that rapid growth of aggregate output does not by itself reduce poverty and inequality or provide sufficient productive employment within acceptable periods of time...(I)t is no longer acceptable in human terms or responsible in political terms to wait several generations for the benefits of development to trickle down until they finally reach the poorest groups (ILO 1976:4).

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[3]For greater clarity, the term 'basic needs approach' has at various times been referred to as the 'basic needs regime', the 'basic human needs approach', the 'human-centered development approach', the 'poverty focus', etc. Regardless of precise terminology, basic needs largely refer to the most fundamental requirements for physical survival - food and nutrition, drinking water, basic health, shelter, and basic education (ILO 1976; Hopkins and Van Der Hoeven 1983; Moon 1991). That these fit into Abraham Maslow's famous hierarchy at the level of 'physiological needs' (Chapter 2) is a point not lost on most scholars (Seers 1972: 24; Streeten 1981a: 353; Hopkins and Van Der Hoeven 1983: 7).

[4]Though it achieved international credibility and acceptance at the Conference, the concept of 'basic needs' was not of course introduced here. Indeed, writers on poverty in India spoke of 'minimum levels' and 'poverty levels' decades beforehand (Cutler 1984). Furthermore, some scholars had been calling for new, BNA-related development perspectives since the early 1970s. Seers, for one, argued that: "a 'plan' which conveys no targets for reducing poverty, unemployment and inequality can hardly be considered a 'development plan'" (1972: 24). Inspiration was also derived from an ambitious effort undertaken in the mid-1970s by the Bariloche Foundation (Herrera 1976), which formulated a mathematical model using eleven indicators to predict the time period necessary for states to "satisfy basic needs to required levels". Though certainly not immune from criticism, this theoretical project had an impact on the unfolding 'basic needs' debate.

The Conference conceded that a radical rethinking of development approaches would have to occur, and adopted a resolution specifying that: "Strategies and national development plans and policies should include explicitly as a priority objective the promotion of employment and the satisfaction of the basic needs of each country's population" (Emmerij and Ghai 1977: 13).

The BNA thus confronts the premise that the poor must be patient for the fruits of economic growth to be realized (Croswell 1981, Lewis 1981). Outlining the problem in terms of human development priorities, the GNP/GDP per capita variable is rejected as the standard measure of development (Streeten and Burki 1978; Ram 1982b). Instead, the BNA defines poverty:

> ...not in terms of income, poverty lines, and deciles of income distribution, but as the inability to meet certain basic human needs on the part of identifiable groups of human beings. Poverty is characterized by hunger and malnutrition, by ill-health, by lack of education, of safe water, of sanitation, of decent shelter (Streeten quoted in Leipziger 1981: xi-xii).

Contrary to the worries of neo-liberal theorists, fearful of potentially disruptive consequences arising from the state's tampering with the market, most (sensible) BNA supporters do not advocate a trade-off between growth and basic needs (Streeten 1981b). In fact, one of the perceived advantages of BNA programs is the selective targeting of the poor, which "makes it possible to satisfy the basic human needs of the whole population at levels of income per head substantially below those that would be required by a less discriminating strategy of all-round income growth, and therefore sooner" (Streeten 1981a: 337).[5] Although universally-applicable BNA strategies are not proposed for governments to adopt, since selectively targeting the poor involves country-specific prescriptions,[6] the typical features of a BNA strategy often include: (1) a redistribution of assets; (2) some transfers to the very poor; (3) an expansion and enhancement of public services; (4) employment training and creation programs; and (5) an emphasis on 'human capital investment' (Leipziger 1981: 114).

Interestingly, there is considerable convergence here between the two paradigms. The World Bank acknowledges the importance of these five BNA features but makes a careful distinction between what is desirable and what is ultimately possible :

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[5]The idea of selectively targeting the poor is reflected in the very focused nature of BNA studies. Needs-deprivation is calculated in terms of the 'shortfalls' in the satisfaction of certain needs. Strategies are then devised for addressing them. For instance, in their influential work Streeten and Burki (1978: 417-418) calculated the 'shortfall populations' for three basic needs and the subsequent investment cost of a 'global basic needs program'. For a more detailed look at the specifics behind BNA strategies, see Hopkins and Van Der Hoeven (1983: 7-8).

[6]Clause I.5 in the Programme of Action adopted by the World Employment Conference of 1976 states that: "It is important that the concept of basic needs is a country-specific and dynamic concept....(and it therefore) should be placed within a context of a nation's overall economic and social development" (Emmerij and Ghai 1977: 24).

> Governments that seek to increase the assets of the poor have pursued two approaches - redistribution of existing assets (such as land) and increased public investment in human capital of the poor. Both policies are beneficial to the poor...(The first policy) is resisted strongly (by entrenched elites)...The second approach, therefore is likely to be more feasible (World Bank 1990a: 52-53).

Its own advice to governments on how to help the poor is summed up in a two-part strategy, best described as 'growth with redistribution': (1) efficient labour intensive growth together with (2) investment in human capital (World Bank 1990a: 55). This focus on 'human capital' must be complemented by structural adjustment policies (where required) and other measures designed to ensure the efficient functioning of the market. In effect, the World Bank argues that:

> Governments have a central role...of providing for a desirable distribution of income and the alleviation of poverty, ill-health, and literacy. By providing *a safety net*, governments can fulfill their humanitarian duties and at the same time reinforce a social consensus *in favour of economic growth* (World Bank 1987a: 58; emphasis added).

This somewhat minimalist view of the role of the state,[7] though not overtly advocating a particular regime-type,[8] suggests that only market-friendly governments may successfully pursue its development prescriptions, thereby ruling out other political economies altogether.

In contrast, the BNA's prescriptions span "the ideological spectrum...(thus making) cross-country interpersonal comparisons of welfare comprehensible" (Weigel 1989: 9).[9] Far from being minimalist, the BNA's emphasis on "supply management (ensures a) substantial role for government" (Streeten and Burki 1978: 413-414). The size of government, however, is not the issue: "what matters for human development is what functions the state performs, and how well it performs them, not how large it is" (Griffin

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[7]The World Bank's view on the role of the state in development will be considered in Chapter 7.

[8]The World Bank's advocacy of democratic structures and practices is often tied to the question of 'good governance'; the two are not synonymous (Leftwich 1994: 366). Moreover, this concept also has a narrow administrative meaning which is somewhat problematic: "while it can hardly be doubted that this is an essential feature of *any* successful development process... the current preoccupation with good governance is naive and simplistic. It is part of the technicist illusion,...which holds that there is always an administrative or managerial 'fix' in the normally difficult affairs of human societies and organizations, and that this also applies to the field of development"(ibid: 364).

[9]To illustrate this point, Streeten (1981b: 116-122) distinguishes between three types of polities--socialist planned economies, market-oriented economies, and mixed welfare-oriented economies--and examines how each type has spawned its share of basic needs success stories: Cuba and China (socialist); Taiwan and South Korea (market); and Sri Lanka (mixed welfare). He concludes: "each type followed a different development strategy, yet was successful in meeting basic needs. This suggests that there is no single basic needs strategy, but lessons can be learned from the different approaches". (For another, more random survey of 'basic needs' case studies see Hopkins and Van Der Hoeven, 1983: 24-31.) These examples disprove and counter the ill-founded criticism that the BNA somehow concealed a call for a world-wide socialist revolution (Streeten 1979: 142); although, it should be added,the popularity of the Bariloche model (Herrera 1976) - which rested on the fictional premise that a socialist production system was operating globally - did not help matters.

and McKinley 1993: 10). This central role for government reflects the belief that markets alone are not enough. Indeed, on the basis of the findings in his excellent study, Moon (1991: 109-111) concludes that:

> Markets - if left unbridled - tend to allocate resources in ways that yield sub-optimal basic needs fulfillment...(Hence) for those who possess nothing to offer in exchange for the resources that would increase their life chances, only an authority system - the political instrument of the state - offers aid.[10]

How the 'aid' is to be determined and distributed is open to divergent opinions. One view suggests that only through grass-roots political mobilization and representative democracy can people themselves determine "the scope, content and priority of their own basic needs...(since other alternatives) must seem authoritarian, or at best paternalistic" (Ghai and Alfthan 1977: 20). In one of the few surveys of its kind, Morrison and Waxler (1986) examined the variation of basic needs fulfillment across local districts in Sri Lanka over the 1971-73 period and found that "when locally accountable leadership gains authority to lead the economic, social and political development of their districts the levels of health, education and employment also improve". The need for local, grass-roots participation has been a constant theme in the UNDP's Human Development Reports.

Others agree with the view that local people should participate in the decisions which may affect their lives but argue that, if any progress is to be made at all, 'experts' must formulate and execute development plans. Such expert-guided action may be described as "discriminating or selective or educational" (Streeten 1981b: 26). Referring to one of its own specific initiatives, the World Bank (1983a: 15) argues that:

> Local participation, though an extremely important objective, is not a simple solution: it all depends on who participates and how...To ensure that the poor benefit, it may be necessary to mix participation with instruction, as in the effective Training and Visit System of agricultural extension in Rajasthan, India; or perhaps *with some measure of outside organization and paternalism*, as exemplified by the successful Bank-supported Indian dairy cooperative based in Anand. (emphasis added)

On a more general level, few BNA advocates consider democratic governance alone to be sufficient for the task of alleviating basic needs deprivation. Indeed, Carr-Hill provides a familiar explanation for why it is 'utopian' and 'naive' to accept this assumption:

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[10]This contravenes the (more extreme) neo-liberal belief that individuals should rely on their purchasing power to 'buy' the basic goods and services they require. Even if, for the sake of argument, this premise were accepted, and people somehow *could afford* such goods and services, one may question the rationality of the consumer (the 'secondary poverty thesis'), since various studies have shown that "many people, in spite of adequate incomes to buy the products that would keep them well nourished and healthy, do in fact spend their money on other things and therefore suffer..." (Streeten 1984: 973). Stated differently: "what people do depends as much upon market forces (eg. advertising, shortages, prices, fashion) as it does upon their real needs" (Hopkins and Van Der Hoeven 1983: 8).

> there has been considerable experience - and disillusionment - let alone literature, with the end result of popular referenda or representative democracy. For the former to reflect properly people's views, we require that everyone has perfect information and equal influence; and for the latter that representatives actually do represent. Both of these are very Utopian assumptions so that, although the emphasis on popular power is welcome, it can be dangerously naïve... (quoted in Hopkins and Van Der Hoeven 1983: 5).

Streeten (1981a: 366) forwards another interpretation of the dilemma between democracy and basic needs:

> If society were organized benevolently, like a zoo, or less benevolently, like a well-run prison, physical needs would be met at a high level, but human rights would be denied. On the other hand, the civil rights principle of one man, one vote might easily conflict with the satisfaction of basic needs. In a democracy in which everyone votes in his narrow, material self-interest, and there are no cross-percentile alliances, the poor will never have enough votes to get redistribution to them enacted and...(therefore) will not have their needs met...*Thus basic needs can be met in ways which deny human rights, and human rights can be practiced in ways which reject basic needs.* (emphasis added)

By the end of the 1980s, a consensus had emerged between the two paradigms over the need to consider economic growth and human development as co-realizable priorities (Griffin and Knight 1990). Why this change of outlook? Simply stated, the search for a new moral dimension to development issues assumed paramount importance as the inadequacies of each approach became clear. The dilemma was highlighted in the 1990 World Development Report: "it is possible to have economic growth without much social progress. The converse is also true: social indicators can be improved even in the absence of rapid economic growth" (World Bank 1990a: 51).[11] Although this proposition was not new, it reflected the considerable attention that greeted the UNDP's first Human Development Report in 1990. The opening paragraph of this landmark publication boldly proclaims:

> This Report is about people - and about how development enlarges their choices. It is about more than GNP growth, more than income and wealth and more than producing commodities and accumulating capital. A person's access to income may be one of the choices, but it is not the sum total of human endeavor (UNDP 1990: 1).

[11]This dilemma has been confirmed in a number of different studies. After examining six country cases, King (1981: 499) concludes: "even though most non-communist LDCs in Asia have experienced rapid and sustained economic growth over the last decade, this remarkable progress has been accompanied by persistent poverty, growing numbers of poor people, and widening inequality in many of them". Looking specifically at South Korea, a country with a very high GNP per capita growth rate of 7.3% for 1965-80 (UNDP 1994), Shin and Snyder (1983: 204) find that "the rate of GNP growth itself appears to have little effect on the rate of improvements in the overall quality of life". Similarly, in his study of African regimes Berg-Schlosser (1984: 135) found that: "stable authoritarian systems have the highest per capita growth rate for the period under consideration, but the actual improvement of living conditions for a large part of the population...is the lowest of all types! Thus...the economic performance of these systems can be called, to a large extent, 'growth without development'".

The World Bank has since followed the UNDP's lead in proposing a broader definition of development, to the extent of even embracing indicators of human development - consumption per capita, life expectancy, and educational attainment (World Bank 1990a: 39) - similar to those which comprise the UNDP's Human Development Index. In short, a universal agreement now exists that "(socio-economic) success needs to be evaluated according to the various dimensions of development, *not just economic growth*" (World Bank 1991a: 49).

1.2 Democracy and Development: An Overview of Existing Empirical Research

Given its relatively recent appearance on the scene, the concept of human development has not enjoyed the analytical coverage granted to its more traditional counterpart, economic development (typically measured using the GDP/GNP per capita variable). Before reviewing the results produced by the few such efforts to date, it is prudent to first examine the extensive findings regarding democracy and economic development.

The Findings Regarding Democracy and Economic Development

Investigations into the relationship between democracy and levels of economic development have been more conclusive than those examining the relationship between democracy and economic growth. Studies of the wealth-equals-democracy hypothesis are plentiful and, according to Diamond (1992: 453), conclusive: "all of them have strongly supported Lipset's thesis". Although there have been partially dissenting voices (Shannon 1957; Laband 1984; Cammack 1994b; Roemer 1995), there is a fairly widespread view that national income levels have a significant influence on the likelihood that democratic forms of government will emerge (Pourgerami 1988; Pourgerami 1991; Huntington 1987; Huntington and Nelson 1976; Hadenius 1992; Liu 1993; Diamond 1992; Jackman 1973; Moore 1995). "The weight of evidence," Moore argues (1995: 1), "points fairly clearly in one direction: that there is a distinct correlation, at any moment in time, between national wealth and the degree of democracy".

The relationship between democracy and economic growth is mired in considerably more doubt and confusion. Most studies begin by posing the same question: Does democracy promote, hinder or have no observable effect on economic growth? Three distinct perspectives emerge - Compatibility, Conflict, and Skeptical - whose underlying arguments are familiar enough to require but a brief synopsis here (Huntington and Nelson 1976; Huntington 1987; Sirowy and Inkeles 1990; Sorensen 1993b; Przeworski and Limongi 1995).

With its thoroughly liberal roots, the Compatibility Perspective may be argued from several slightly different angles. In its more extreme manifestation, it considers democracy to be a *prerequisite* for economic growth. Despite enjoying virtually no empirical support, this view has recently come into vogue as part of the post-Cold War euphoria. As Leftwich (1993a: 605) observes:

> what is new is the proposition that democracy is a necessary prior or parallel condition of development, not an outcome of it...Contrary to the best analytical work on development by political scientists of different persuasions, the new orthodoxy assumes that there are no inherent tensions, conflicts or difficult trade-offs over time between the various goals of development - such as growth, democracy, stability, equity and autonomy.

Some proponents of this perspective forward the more cautious claim that, although democracies may not perform as well as some authoritarian regimes in terms of economic growth, their performance rates may still be regarded as 'satisfactory' (Kohli 1986: 156). Yet others claim that democracy and economic growth are mutually reinforcing since, to use Huntington's (1987: 10) analogy, economic growth is the 'locomotive' which pulls the other four general development goals - equity, democracy, social harmony / stability, autonomy - along in its wake.[12] On the whole, the problem of determining causation is just one of the many criticisms levied against this perspective: "the liberal model of development has been shown to be methodologically weak, empirically questionable, and historically irrelevant, except under specialized circumstances" (Huntington and Nelson 1976: 20).

The Conflict Perspective argues that democracy and economic growth *cannot* be achieved simultaneously. Consequently, trade-offs must be made once the three key developmental objectives - rapid economic growth, democracy, and socio-political stability - are placed in order of desired priority. Given the preoccupation of political development theorists with issues of stability and institutionalization in the developing world, it is not surprising that "overall, the political science literature tends to urge the temporal priority of order over democracy" (Huntington 1987: 19). Most development policy-makers have also accepted this notion of a trade-off, but with economic growth as the first priority (World Bank 1991a: 137). The inability of democratic states to match the relatively high economic growth rates produced by some authoritarian states (the East Asian NICs in particular) has led some to conclude that adopting and sustaining a strategy of rapid growth necessitates the sacrifice of democratic liberties, for "as the costs of rapid development mount sharply, so does the impetus towards control and repression" (Lamb 1981: 106).

Several reasons have been forwarded to support the view that democracies are somehow inherently incapable of rapid growth. In their comprehensive survey of the

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[12]One may wonder, however, whether this particular argument really does suggest 'compatibility' since democracy is seen as the *by-product* of economic growth, not its *catalyst*. If the direction of causation is from economic growth to democracy, then this line of reasoning has more in common with the Conflict Perspective.

literature, Sirowy and Inkeles (1990: 129-130) list three possible explanations: (1) democracies in poorer states are constantly preoccupied with maintaining order and stability; (2) democracies have greater difficulty 'forging a consensus' among disparate social and ethnic groups and then mobilizing these groups for 'rapid national development'; and (3) the nature of democratic politics may "well act to distort the economy...as government officials shift their allegiances among policies based on short-run political expediency, rather than focusing exclusively on policies oriented toward national development in the long run". In another such survey, Przeworski and Limongi (1995: 7) note the importance to economic performance of 'state autonomy', defined as "a combination of the 'capacity' of the state to pursue developmentalist policies with 'insulation' from particularistic pressures, particularly those originating from large firms or unions". Weede (1983: 23) is fairly explicit: "While authoritarian governments are certainly capable of (macro-economic) policy mistakes, in democracies they seem to be the natural outcome of a political process in which politicians respond to articulated interests, and more strongly to the more articulated and better organized ones". Hence, "whenever governments assumed extraordinary powers to curb individualistic, sectarian and extra-territorial interests, economic conditions improved sharply" (Rao 1984: 78). In short, "the implications of this position are clear: political democracy is a luxury that can be ill-afforded by Third World countries" (Sirowy and Inkeles 1990: 128).

Unlike the two aforementioned positions, the Skeptical Perspective assumes that there is no direct relationship between democracy and economic growth, since there are good and bad performers of every regime-type. Relatively democratic Botswana grew at an exceptionally high GNP/C rate of 6.1% between 1980 and 1992, compared to a dismal growth rate of -1.0% for Venezuela over the same period (World Bank 1994a). By the same token, not all authoritarian regimes have performed as well as the East Asian 'tigers'. Looking at African and Latin American variants it becomes evident that: "any attempt to make a general claim on the basis of the East Asian experience that authoritarianism will invariably help create (a strong performer) must be rejected" (Sorensen 1993a: 27).

Proponents of the Skeptical Perspective also argue that comparisons of regime-type performance are often based on different points of reference. A typical tendency is noted by Przeworski and Limongi (1995: 11): "The critics argue that dictatorships are better at mobilizing savings; the defenders that democracy are better at allocating investment". Therefore, both sides may claim victory using different criteria. Moreover, when the definition of economic development is broadened, it may be argued that, whereas authoritarian regimes may, on the whole, perform better in terms of GNP/C rates, democracies tend to perform better using other economic criteria. Kohli's (1986: 153, 159-160) elaborate overview is worth quoting at length:

> the developmental performance of Third World democratic regimes must be judged satisfactory...there is enough evidence to suggest that democratic regimes tend to promote a broadly similar pattern of development. Countries as diverse as India, Malaysia, Sri Lanka, Venezuela and Costa Rica have achieved relatively impressive records. For the most part, their economies have grown at moderate but steady rates. Income inequalities within most of them have either remained stable or even narrowed, and their foreign debts have been kept within manageable limits. These countries contrast with a number of prominent cases steered by bureaucratic-authoritarian regimes. In the latter, growth rates may have been somewhat higher, but income inequalities widened, and foreign debts rose to staggering proportions....(However) most cases of very high growth rates have involved authoritarian regimes...Specific types of authoritarian regimes are capable of installing hyper-growth development strategies, whereas democracies tend to muddle through.

Which perspective does existing empirical evidence support? Given the highly inconclusive findings, one would have to say the Skeptical Perspective. Whereas Pourgerami (1988, 1991) claims to have produced "conclusive evidence" in favour of the Compatibility Perspective, Park (1984), Huntington (1987), and Sloan and Tedin (1987) disagree in favour of the Conflict Perspective. McKinlay and Cohan (1975), Weede (1983, 1990, 1991), Munslow and Ekoko (1995), and Roemer (1995) have produced results which are weak and inconclusive.

Three major cross-national surveys of the literature have also produced mixed results. Of the thirteen studies reviewed by Sirowy and Inkeles (1990), three support the Conflict Perspective, six support the Skeptical Perspective, and four report "qualified or conditional" support for the Compatibility Perspective. Brunetti and Weder (1995) looked at twenty empirical studies and observed that "two find a negative, ten no, five a conditional, and three a positive correlation" between democracy and economic growth. Furthermore, of the 21 separate findings examined by Przeworski and Limongi (1995), "eight found in favour of democracy, eight in favour of authoritarianism, and five discovered no difference".

To some extent, the inconsistent results produced by these studies simply reflect differences in samples, methodologies, and chosen variables. As suggested by the Skeptical Perspective, however, one should be wary of extrapolating generalizations (e.g the inherent superiority of all authoritarian states) from the performance of the few (e.g Thailand, South Korea, Indonesia, China). But since these few superior performers have not been particularly democratic, one key tenet in the Conflict Perspective has not been falsified by the above evidence: a non-democratic regime may be a necessary though insufficient condition for *rapid* economic growth.

The Findings Regarding Democracy and Human Development

Since economic development is strongly (but not perfectly) correlated with human development, as subsequent chapters will show, one may suspect that the preceding account

sheds some light on the relationship between democracy and human development. To date, this relationship has not been examined in any comprehensive manner, even if the HDI and PQLI are accepted, however reluctantly, as suitable measures of human development.[13]

To be sure, some have used the HDI to determine correlations at specific points in time (Diamond 1992; Liu 1993; Lane and Ersson 1994, 1996), but these efforts provide a very basic overview only. Yet others have employed the HDI primarily for the purpose of illustrating differences between individual or regional cases (Haynes 1996; Monshipouri 1995; Smith 1996). Crucially, these investigations do not make any reference to changes in human development indicators over time (i.e., they do not measure performance), thereby neglecting to record if living conditions have either *improved or deteriorated*, and by how much. Studies using the PQLI have been just as unsatisfactory, with some partial exceptions (Moon and Dixon 1985; Moon 1991).

Virtually all of the studies employing either the HDI or PQLI in cross-national samples have found the relationship between democracy (or political liberties) and the level of human development to be positive and strong, but not strictly linear (Diamond 1992; Haynes 1996; Lane and Ersson 1994, 1996; Liu 1993; Moon and Dixon 1985; Moon 1991; Moore 1995; Pourgerami 1988, 1991, 1992).[14] This overwhelming consensus has prompted one observer to reformulate Lipset's thesis as follows: "The more well-to-do the people of a country, on average, the more likely they will favor, achieve, and maintain a democratic system for their country" (Diamond 1992: 468). The reason behind this proposition is familiar: "A certain minimum quality of life is needed to make democracy possible, because no state can be stable in a situation of extreme poverty" (Lane and Ersson 1994: 215).

The relationship between democracy and human development *performance* has not been explored to any significant extent. Although Monshipouri (1995) does not undertake

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[13]Despite some slight methodological differences between the HDI and PQLI, both essentially "measure similar phenomenon" (Lane and Ersson 1996: 57). The HDI's three components are life expectancy, educational attainment (literacy and school enrolment) and real GDP per capita ($PPP), whereas the PQLI's three components are life expectancy, infant mortality and literacy. Although the basis for a broader conceptual model will be outlined in Chapter 3, suffice it to note here that these two measures do not capture all of the various dimensions of human development which collectively give this concept its fullest meaning. Technically, therefore, comparative studies using either the HDI or the PQLI measure not 'human development' but 'basic needs'.

[14]This conclusion has usually been confirmed by cross-national studies employing several social indicators instead of one composite measure. The World Bank (1991a) has found a moderately strong and positive relationship between 'political liberties' and indicators such as women's education, overall education and infant mortality. Hadenius (1992) finds a particularly strong relationship between democracy and indicators such as literacy, infant mortality and the percentage of people not employed in the agricultural sector. In a dissenting capacity, Vorhies and Glahie (1988) find only a weak relationship between democracy and the overall level of 'social development' as defined by six indicators: GNP per capita, life expectancy, literacy, infant survival, income equality and the percentage of non-agricultural GDP. In an earlier study, McKinlay and Cohan (1975) found no relationship between regime-types and socio-economic variables such as the cost of living, the food index and primary education.

extensive analysis (focusing on just four case studies), he is one of the very few to even consider human development performance as the change in HDI levels between two points in time (1970 and 1990). Weede's failure to adopt a similar technique calls into question the conclusion produced by his more ambitious effort: "neither democracy nor its opposite, regime repressiveness, make much difference for...human development indices (such as the HDI)" (Weede 1993: 185).[15] Methodological difficulties also undermine the very different conclusion arrived at by Pourgerami (1992: 373) using the PQLI: "democratic institutions are more likely to accelerate (PQLI) growth".[16]

Other studies have produced equally inconclusive findings with smaller cross-national samples. Berg-Schlosser (1984) examined how 45 sub-Saharan African countries performed in terms of PQLI disparity rates over the 1960-75 period and found that socialist countries achieved the best results. Sloan and Tedin (1987) looked at the changes (1960-80) in the levels of four key social indicators (life expectancy, infant mortality, literacy and school enrolment) among 20 Latin American countries and found no differences between the regime-types. Using almost identical indicators (life expectancy, infant mortality, literacy and GDP per capita) in their survey of the 51 poorest countries, Dasgupta and Weale (1992) found positive and significant correlations between political/civil liberties and indicator changes (1970-80).

Finally, some observers have sought to evaluate regime-types based on the aggregate investments made in social welfare programs. While this approach emphasizes inputs (expenditures) rather than outcomes (actual rates of change), and thus holds little value for this thesis,[17] it is interesting to note that even here the results are mixed. Pluta (1979) examined the South American context during the 1960s and observed that civilian governments devoted greater expenditures on social programs than their military counterparts. Finding strong positive correlations for a broader sample at various points in time, Lane and Ersson (1990) confirmed this tendency with respect to expenditures on

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[15]Though selecting a wide sample (129 countries), Weede has HDI data for only one date (1987). He thus chooses to estimate human development changes over the course of roughly one decade by using regression analysis: the HDI (1987) is regressed on life expectancy (1975) and on GNP per capita (1975). Weede (ibid: 182) himself acknowledges some obvious shortcomings with this method.

[16]Pourgerami's sample is substantial (104 developing countries) but his methods are not particularly clear. Nowhere does he specify the dates which correspond to the PQLI values and Disparity Reduction Rates (DRRs). In an endnote he makes a reference to Morris (1979), which suggests that the PQLI values might be drawn from the early 1970s; no clues are offered for the DDRs. And while he makes a reference to the source for his measure of civil liberties (Gastil 1985), Pourgerami does not indicate whether he is using data for one point in time or an average over a given period. Since he relies on "estimation results", it may perhaps be inferred that his political data (for Gastil's civil liberties index) do not exactly correspond to the dates for his PQLI and DDR values. Because of this confusion, which also surrounds some of his earlier efforts (1988, 1991), it may be said that Pourgerami has *not* sufficiently validated his 'development-democracy-growth hypothesis'.

[17]To borrow Ingham's (1993: 1814) succinct distinction: "The question should be, 'What are people capable of doing or being?'. For example: 'Can people read and write?' not 'How much is being spent on primary education?'; not 'What is the output of foodstuffs?' but 'How many people are malnourished?'; not 'What is the expenditure on health?' but 'Are people living longer?'".

welfare, health, and education. However, in a survey of 32 developing and 26 industrial nations for the period 1965-75, two scholars concluded that:

> (the level of democracy) has a substantial effect on changes in Social Security Efforts for industrial nations, but that there is relatively little effect for developing nations. This outcome is consistent with the theories of those who argue that democracy will have a greater effect on the distribution of societal resources in those nations with a greater economic surplus (Williamson and Pampel 1986: 24).

1.3 Synopsis of Research Design

Using data from 123 countries (Appendix A), this thesis will provide a detailed empirical account of the relationship between democracy and human development over the 1970-90 period.[18] To substantiate any conclusions arising from the evidence, indicator levels are assessed at three points in time (1970, 1980 and 1990) and indicator changes are recorded for three periods (1970-80, 1980-90, and 1970-90). To shed further light on the relationships under investigation, controlling variables are employed throughout (levels of economic development, regional categories, etc). The sources for the data are given in the Technical Notes and various appendices found at the end of the paper.

This thesis consists of eight chapters. Chapter 2 begins with an overview of the traditional perspectives on democracy and development, examining the literature on political development and democratic preconditions. Attention will then be given to the arguments forwarded in the 'humanist' literature which has inspired this thesis and which, it is argued, should underpin efforts to reinvigorate comparative politics with a normative dimension.

Chapter 3 argues the need for new measures of democracy and human development, and then demonstrates how such measures were constructed for the purposes of this research. These include: a new measure of democracy, the Level of Democracy (LoD) index; a new and more comprehensive measure of human development, the Integrated Human Development Index (I-HDI); and several other new measures which capture the various component dimensions of human development (peace/conflict, gender equity, security, liberty, social mobility).

Chapter 4 provides a detailed examination of the relationship between democracy and levels of human development. After first establishing the general relationship, I proceed

[18]The year 1970 marks roughly one decade after many developing countries had achieved their independence; their political orientation and structures had, therefore, become more or less apparent by this date. Social indicators research was still in its infancy prior to 1970, so that data remained largely unavailable/unreliable for any sizeable cross-national samples. The year 1990 marks the approximate point after which many developing states (especially in sub-Saharan Africa) embarked on transitions to democratic rule. Sufficient time has not passed for the consolidation of these experiments, so that proper assessments cannot as yet be made (although some preliminary comments are offered in the concluding chapter).

to examine whether the conclusions hold when levels of economic development are controlled for, and whether regional variations influence the findings.

Chapter 5 considers the relationship between democracy and human development performance. Two questions are of particular relevance: (1) Is there a direct linkage between improvements in human development conditions and the level of democracy?; and (2) On average, do democratic states perform better, worse, or no different than non-democratic states? The chapter opens with a look at the general relationship between the variables, proceeds to evaluate this relationship after controlling for levels of human development and economic development, and then examines how performance rates vary across the different regions.

Chapter 6 delves beyond the findings of the composite indices to analyze how levels of democracy correspond to selected basic indicators (literacy, life expectancy, gender equity, etc) specifically in the developing world. Mirroring the approaches taken in the two preceding chapters, the first part of the chapter considers the relationship between democracy and indicator levels, while the second part examines the relationship between democracy and indicator performance rates.

Chapter 7 focuses on the political requirements for establishing what has been called the *virtuous cycle of development:* strong human development performance combined with strong economic growth. After first demonstrating the importance of economic growth to human development performance, the relationship between economic growth and democracy will be considered. I then examine which level of democracy, if any, appears most likely to translate economic growth into human development gains. The final part of the chapter identifies the 'developmental states' for the 1970-90 period and assesses the implications for democratic governance.

Chapter 8 is divided into three parts. The first part summarizes the main findings of this thesis, the second part assesses these findings in the context of the post-1990 transitions to democracy, and the third part provides some final thoughts on the implications arising from the empirical evidence.

CHAPTER 2
AN OVERVIEW OF THE LITERATURE ON DEMOCRACY AND DEVELOPMENT

This chapter provides an overview of the key arguments relating to democracy and development. The first part considers some of the more traditional interpretations of this relationship, including the literature on political development and democratic preconditions. The second part looks at the humanist approach which emerged from earlier attempts to integrate the concept of human development into political analysis. It will become apparent that, although the two approaches begin from altogether premises, the conclusions they draw are remarkably similar.

2.1 Traditional Approaches

Political Development

The relationship between democracy and development has been a central preoccupation of political scientists since the end of the Second World War, especially for those interested in the area of 'political development'. From the 1950s to the early 1970s, this particular school enjoyed a preeminent place within the discipline. The resulting literature, both vast and controversial, was characterized by the attempt to reconcile the theoretical attractiveness of the democratic political model with the practical realities found in the newly-independent countries of the Third World.

Whereas economists have traditionally worked with a commonly accepted measure of economic development (GNP/GDP per capita), political scientists have not agreed upon a measure of political development. This dilemma was exposed by C.L Taylor (1972: 105):

> ...there is no political goal to produce. Nothing is quite the analogy of wealth. Political development is not the creation of more and more power or authority or sovereignty...These may be redistributed, refashioned, revolutionized, but their aggregate increase is not development.

Given this conceptual ambiguity and the value-laden nature of the term (Blondel 1995: 49), it is hardly surprising that many different interpretations were forwarded.[1] Judging by the

[1]Pye (1966: 33-44) records ten definitions of political development, as: (1) the Political Prerequisite of Economic Development; (2) the Politics Typical of Industrial Societies; (3) Political Modernization; (4) the Operation of a Nation-State; (5) Administrative and Legal Development; (6) Mass Mobilization and Participation; (7) the Building of Democracy; (8) Stability and Orderly Change; (9) Mobilization and Power; (10) One Aspect of a Multi-Dimensional Process Social Change. Jaguaribe (1973: 198) lists five interpretations: (1) as political modernization; (2) as political institutionalization; (3) as the development of the capability of the political system; (4) as the development of the contribution of the political system to the overall development of society; and (5) as political modernization plus political institutionalization. Blondel (1995: 50) relates the term to: (1) social and economic development; (2) the organization of the political system; and (3) political values (mass mobilization, the movement towards democracy).

sheer volume of the literature, two interpretations were particularly influential: political development as the movement towards democracy; and political development as the institutionalization and organization of the political system.

The first interpretation caused considerable commotion in its relatively short lifespan (roughly from the 1950s to the early 1960s). Unabashedly calling for "the dissemination of Western democracy throughout the 'new states' of the developing world" (Cammack 1994a: 353), the early writers on political development were, predictably, accused of serving specific ideological and political ends.[2] Political development was equated with democratization, so that formally democratic institutions and practices were accepted as evidence of *development.*[3] Merely having a democratic form of government was enough to warrant accolades, irrespective of a country's socio-economic conditions. By implication, democratic governance could be introduced into a given society without reference to its stage of development.

The subsequent failure of democracy to make significant inroads in the developing world forced a gradual shift in emphasis. Some began to argue that developing societies could not be expected to embrace democracy 'prematurely' (Cantril 1961: 49; Cutright and Wiley 1969: 35). By Lipset's admission (1970: 35):

> ...with the emergence of military and one-party regimes in many of these (developing) nations, an almost total pessimism concerning the democratic potential of these countries has replaced earlier hopes. Scholars, journalists and politicians from stable democracies now conclude that they erred in anticipating democratic institutions in nations whose economy and culture were not yet ready to sustain tensions of party conflict.

A country's stage of development could no longer be ignored. Recalling Lipset's famous hypothesis - "The more well-to-do a nation, the greater the chances that it will sustain democracy" (Lipset 1981: 37) - it was proposed that democracy must be seen as a *by-product* of development. The irony that liberal writers would eventually embrace Marx's determinism was not lost on some observers: "(this) can only be described as a neo-Marxist premise: that the causal flow would be from economics to politics rather than in the

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[2]Gendzier (1985: 4) points out that: "Interpretations of politics and society that were codified in Political Development theories were the product of a particular vision of American society....(This) vision was expressed in debates provoked by national and international developments, from McCarthyism to the cold war". Likewise, Needler (1991: 39) argues that: "that era, the 1950s and 1960s, was characterized by a particular configuration in international politics and by a particular stage in U.S academic evolution, with some curious relations between the two dimensions". Cammack (1994a: 356) is more direct: "(these writers) aspired not only to understand but also to influence the politics of (developing) states by direct academic intervention on behalf of foreign elites and U.S interests abroad".

[3]This idea certainly inspired the very few empirical measures of political development. The 'Political Representation Index' (PRI) devised by Cutright and Wiley (1969) employed a series of measures - Parliament Scoring, Chief Executive Scoring and Effective Franchise Scoring - which suggested that the end-objective of any and every state is the establishment and maintenance of democratic rights and institutions. The PRI was essentially a modification of Cutright's earlier Index of Political Development, which rewarded nations "for achieving or maintaining more complex (democratic) forms of organization" (Cutright 1963: 256).

reverse direction" (Huntington and Nelson 1976: 20). Indeed, Marx's dictum - "the country that is more developed industrially only shows to the less developed the image of its own future" (Marx quoted in Somjee 1986: 4) - influenced attempts to reconcile democracy with development:

> Implicit (here was) the acceptance of an image of the Good Society: wealthy, just, democratic, orderly and in full control of its own affairs; a society, in short, very much like those found in (the West). A backward society was poor, inequitable, repressive, violent and dependent. Development was the process of moving from the latter to the former (Huntington 1987: 6).

Emphasizing the structural/institutional aspect of political development, writers also began to focus more intently on the inherently destabilizing nature of the *process* of development, or 'modernization'. It was argued that modernization produces increased levels of social mobilization, where "uprooted, impoverished and disoriented masses" are the product of a "process in which major clusters of old social, economic and psychological commitments are eroded or broken own and people become available for new patterns of socialization and behaviour" (Deutsch 1961: 494, 498).[4] Dramatic increases in political participation necessarily follow, almost invariably leading to "instability and violence" (Huntington 1970: 323). This turbulent environment, in turn, serves as fertile soil for the growth of extremist political movements (Lipset 1981: 54). Taken together, these consequences of rapid socio-economic change suggest not only the impossibility of democratic governance, but also the probability, if the consequences were left unchecked, of complete "political decay" (Huntington 1965: 386; Nordlinger 1970: 340).

For these early proponents of the Conflict Perspective (recall Chapter 1), the prescription was to be found in strong institutional structures. These were necessary, Pye (1965: 7) argued, to "maintain certain kinds of public order, (and) to mobilize resources for a specific range of collective enterprises...". Apter (1971: 15, 66) took this argument one step further: "the task of government...(is) to maximize development and order", which is best achieved "through some variant of a bureaucratic system". This heavy reliance on state "coercion and persuasion" (Vorys 1965: 18) reflected an unpleasant reality:

> In many non-Western areas of the world where individuals have had no chance to achieve political maturity, where social change is spotty, sporadic, and uneven, the leaders who emerge, if they are to remain leaders, must wield their power and guide their people in wide-ranging activities, including under the cloak of political development many aspects of personal and social behaviour which in a more mature, democratic West would regard as an infringement of personal rights (Cantril 1961: 60).

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[4]Deutsch (1961: 503) constructed a "quantitative model of the social mobilization process" consisting of eleven indicators: "...demonstrations of machinery or merchandise; shift into mass media audience; increase in voting participation; increase in literacy; change of locality of residence; population growth; occupational shift out of agriculture; change from rural to urban residence; linguistic, cultural or political assimilation; income growth; and income growth per capita".

Political stability and state effectiveness took precedence under this interpretation of political development, so that "the discussion of the developing countries was disconnected from the question of democracy" (Cammack 1994a: 367).

Overall, the literature on political development has been criticized for "its ethnocentric, ahistorical and conservative bias, (and) its failure to make sense of what transpired in the Third World..." (Gendzier 1985: 8). Others dispute what they see as a proposed unilinear path of development which all societies are meant to follow (Taylor 1972: 108; Bauzon 1992b: 38). Cammack (1994a: 358), on the other hand, dismisses these claims:

> ...none of the protagonists of political development theory adopted a unilinear theory of development. They saw the process as problematic from the start; they were all concerned with the dislocations it produced, and directly concerned with public policy in the developing world as a result, precisely because the dissemination of Western democratic institutions was always viewed with apprehension.

History has in fact supported the premise that the process of rapid development *is* 'problematic', producing those very 'dislocations' which political development theorists had correctly identified (Agpalo 1992: 86).

In terms of their specific focus, however, criticism can be levied against the tendency to evaluate societies as being more or less *developed* on the basis of either the nature (democratic or not) or the strength (institutional capacity) of their political structures. As Eckstein (1971: 9) remarks: "the crucial limit of all this work is that it does not itself attempt to posit imperative criteria of political performance...(in other words) the criteria themselves are never regarded as 'compelling'". This is directly attributable to the conscious attempts to "disassociate morality from any linkages to development" (Bauzon 1992b: 39).[5]

Consider, for example, Huntington's (1965: 409) treatment of Argentina and India in the mid-1960s:

> So long as Argentina retains a politics of coup and countercoup and a feeble state surrounded by massive social forces, it cannot be considered politically developed, *no matter how urbane and prosperous and educated its citizens are...* In reverse fashion, a country may be politically highly developed, while still very backward in terms of modernization...So long as (the Congress Party and the Indian Civil Service) maintain their institutional strength, it is ridiculous to think of India as politically undeveloped, *no matter how low her per capita income or how high her illiteracy rate* (emphasis added).

[5]To be fair, some writers did attach explicitly moral ends to the instrumental means of stability. Cantril (1961: 59), for instance, argued that: "The primary criterion by means of which a political system is tested is that it provide sufficient political stability for the realization of individual needs and for directed, purposeful change to achieve even greater human satisfactions".

Had he applied 'compelling criteria' such as basic needs provision (or broader still, human development), Huntington would have concluded, of course, that Argentina was considerably more developed than India (as he clearly infers is the case in terms of 'modernization'). Thus the root of the difficulty: "there is a higher degree of agreement on socio-economic norms than on political norms. Few believe...that society should not educate its members or take care of the health of its citizens" (Blondel 1995: 59). As consistently espoused in the humanist literature (section 2.2):

> comparing 'life situations' ought to be done in terms of human situations rather than material or institutional situations...One would not evaluate the institutional set-up of a university as a way of determining the state of 'development' of the educational system. It is what the institution does, not what it consists of, that accounts for 'development' or 'underdevelopment' (Park 1984: 35, 47).

Democratic Preconditions

Despite these criticisms, much of the contemporary writing on democratization derived its initial impetus and inspiration from the propositions outlined above. Attention, however, has since shifted more directly to the general question: What are the observable causes or preconditions for the establishment and maintenance of democracy? Broadly speaking, the 'preconditions' literature may be separated into the four levels of analysis identified by Sorensen (1993b: 26-27): (1) modernization and wealth (level of socio-economic development); (2) political culture; (3) social structure of society; and (4) external factors.[6]

The first approach draws its inspiration from Lipset's hypothesis, from which all modernization theories are derived, that the road from backwardness to modernity brings forth those socio-economic conditions which characterize the democratic experience (Bauzon 1992: 36; Hadenius 1992: 77). Implicit in this view is that 'all good things go together'. Since "the average wealth, degree of industrialization, and level of education is much higher for the more democratic countries..." (Lipset 1959: 75), it follows logically that, as countries become more socio-economically developed, they too would become democratic (Cutright 1963: 253). In brief: "in poor countries democratization is unlikely; in rich countries it has already occurred" (Huntington quoted in Diamond 1992: 455).

While most analysts accept that democracy certainly does correspond to higher levels of economic development, few believe that the relationship is linear (recall the findings

[6]There are certainly other such classifications. Zarate (1994) divides the literature into three areas: (1) socio-economic-factors, (2) cultural factors, and (3) socio-political factors. Pennock's three categories are: (1) history, (2) socio-economic order, and (3) political culture (cited in Vanhanen 1990: 42). Liu (1993) looks at four theories of democratic transition: (1) modernization approach, (2) civil society approach, (3) institutional approach, and (4) the strategic (political elites) approach.

in Chapter 1). Neubauer (1967: 1007) in particular adds an important qualifier by proposing the notion of a democratic 'threshold':

> Certain levels of 'basic' socio-economic development appear to be necessary to elevate countries to a level at which they can begin to support complex, nation-wide patterns of political interaction, one of which may be democracy. Once above this threshold, however, the degree to which a country will 'maximize' certain forms of democratic practice is no longer a function of continued socio-economic development.

Dahl expands on this assumption by attributing specific figures to the upper and lower income thresholds (circa 1970):

> *Proposition 1:* There exists an upper threshold, perhaps in the range of about $700-800 GNP per capita (1957 U.S dollars), above which the chances of polyarchy...are so high that any further increases in per capita GNP (and associated variables) cannot affect the outcomes in any significant way.
> *Proposition 2:* There exists a lower threshold, perhaps in the range of about $100-200 GNP per capita, below which chances for polyarchy...are so slight that differences in per capita GNP or variables associated with it do not really matter (Dahl quoted in Diamond 1992: 454).

Others have also followed in this tradition of selecting a point in time and then examining where democracies fell along the developmental continuum (Jackman 1973; Hadenius 1992; Liu 1993). Of course, such exercises run into the problem of shifting income thresholds over time. Nonetheless, of the two interpretations: "the data are much more consistent with Neubauer's argument for curvilinear effects than they are with the linear developmental hypothesis suggested by Lipset and Cutright" (Jackman 1973: 621).

This approach certainly contains enough obvious exceptions (poor, democratic India; wealthy, autocratic Saudi Arabia) to confirm that the level of development alone cannot determine whether or not democracy takes root in a given country. Other mitigating factors must also be taken into account:

> (T)he development hypothesis that posits a fairly straightforward linear relationship between levels of socio-economic development and levels of political participation needs to be modified in two ways... (With) respect to the promotion of political participation, the impact of a society's external environment may compensate, in part, for a lower level of socio-economic development, and the impact of its traditional culture and behaviour patterns may counterbalance, in part, the effects of higher levels of socio-economic development (Huntington and Nelson 1976: 53).

Diamond et al (1995: 24) pick up on this theme in their wide-ranging study:

> Development enhances the prospects for democracy because - *and to the extent that* - it enhances several crucial intervening variables: democratic values and beliefs, capacities for independent organization and action in civil society, a more equitable class structure (with reduction of absolute poverty), and a less corrupt, interventionist, rent-seeking state.

At most, therefore, the consensus suggests that: "socio-economic conditions do affect the quality of political democracy but they do not prevent the development of a democratic system" (Sorensen 1993b: 19).

The second approach examines the impact of political culture, described as "that intangible nexus which serves as a gauge of the social and cultural resonance and legitimacy of the state" (Kamrava 1996: 47). Though a highly enigmatic concept for researchers,[7] with obvious shortcomings for meaningful cross-national analysis,[8] its explanatory value should not be underestimated. Some even suggest that political culture "may well comprise a sufficient condition for democracy" (Pennock quoted in Vanhanen 1990: 42). At least one empirical investigation has confirmed this assumption: "a substantial proportion of any observed association between economic well-being and democracy is cultural in origin" (Laband 1984: 35).

Since "democracy itself is rooted in a set of cultural values" (Ingham 1993: 1809), it is generally believed to be a concept alien to most developing nations (Kohli 1986: 167).[9] The 'democratic potential' of developing nations therefore varies. "The Third World countries with the best chances of establishing sustained democratic rule," Kohli (1986: 175) argues, "are those with historically inherited institutions that facilitate elite unity". The significance of colonial rule is highlighted in the statistical analysis carried out by Hadenius (1992: 130): "a British background has a positive association with democracy and a French negative. At the same time the fact that states have not been colonies during this century has a much weaker impact".

The rigid application of the democratic model to developing nations, as some writers on political development had originally urged, could therefore be expected to produce distorting consequences. Lipset (1970: 42) himself came to the conclusion that: "exporting models of political systems and ideologies which 'work' in advanced industrialized areas to less advantaged ones is not only bad social science, but much worse, may result in

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[7]As Huntington (1987: 22-23) observes: 'The concept of culture is a tricky one in social science because it is both easy and unsatisfying to use. It is easy (and also dangerous) to use because it is, in some sense, a residual category. If no other causes can possibly explain significant differences between societies, it is inviting to attribute them to culture".

[8]Pye (1965: 16) makes the general observation that: "The conditions of research and the availability of information in different countries set quite different limits upon possibilities for studying one or the other culture". Even if we could somehow propose a widely-accepted definition for the term, the basic problem is that we cannot *quantify* or otherwise operationalize political culture. Researchers are therefore forced to rely on purely subjective measures. The end result in such cases is always open to dispute. One only has to look at the charges of subjective bias and methodological incoherence levied against Almond and Verba's *The Civic Culture* (Somjee 1986: 16-18; Gendzier 1985: 119-124; Zarate 1994: 14).

[9]The very 'Westernized' notion of democracy as merely consisting of formal structural and procedural trappings leaves itself open to many criticisms, aside from the inevitable charges of ideological and cultural bias. If we are to equate democratization with development, Bagchi argues, surely we should in fact be distinguishing between a *democratic society* and a *democratic polity*: "At the very least, we can conceive of a society as being more democratic than others if the life chances of the members of that society are more similar than others, even though procedural democracy...does not yet obtain" (Bagchi 1995: xviii).

disastrous politics". The process by which foreign influences are either accepted or rejected by societies is in fact quite subliminal:

> (What writers on political development overlooked) was the essential permeability of (developing) societies - and for that matter of any society. Instead of acting as hard shells, which, as modernization theorists assumed, had to be broken, these societies tended to act as sponges, absorbing whatever they wanted. In such a process, some things were absorbed more due to contact and exposure rather than through conscious choice (Somjee 1986: 4).[10]

Thus, where they are to be found at all, developing democracies necessarily deviate to some degree from the 'Western model' (an elusive term in its own right). Lane and Ersson (1990: 159) observe that: "even in countries where there has been democracy for a number of years, such as Costa Rica, Columbia and Venezuela, this has been more of an elitist and conservative type rather than true competitive party government". This argument, of course, also suggests that cultural traits invariably shape the nature of authoritarian regimes. The developmental success enjoyed by the East Asian NICs is often attributed to the "paternalistic patron-client style of personal power" (Ingham 1993: 1809), which is described as "a rare species" (Sorensen 1993b: 29).

The third approach considers the socio-political cleavages in developing societies which may affect possible transitions toward democracy. At the heart of this literature is the proposition that: "in all polities there is a fundamental distinction between the culture of the rulers or power holders and that of the masses, whether they are merely parochial subjects or participating citizens" (Pye 1965: 15). Whereas the 'masses' are often portrayed as mere pawns to be manipulated (Kohli 1986: 169), the attitude of elites is believed to be a major factor in influencing whether or not democracy takes root (Huntington and Nelson 1976: 171).[11]

It may be assumed that the central motivation for either supporting or thwarting democratic advances is common from one elite group to another: the fundamental desire to preserve or enhance their socio-economic privileges (Huntington and Nelson 1976: 2). But setting aside the simplistic (though valid) notion of self-interest, elite attitudes are also influenced by the corresponding gulf, derived from this disparity in socio-economic privileges, between what they perceive is their own self-worth and abilities on the one hand,

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[10]It should also be noted that some social groups in developing societies are more influenced by this "contact and exposure" to Western ideas and practices. Indeed, it is often argued that: "the Third World upper stratum is more attuned to Western business, military, bureaucratic, and technical values than the traditional values of its own populace" (Goulet 1995: 188).

[11]This simple dichotomy between the 'rulers' and the 'ruled', drawn for purposes of illustration, assumes that (1) both are monolithic groups, and (2) that the political contest is actually waged between them. The reality is much different. In most developing societies the real political contest is often between two or more groups of elites. In these cases, the significance of elite attitudes lies in the possible selection of democracy as the medium of competition: "...before democracy can be born, elites must come to 'agree to disagree' and be willing to put 'rules above personal power'" (Kohli 1986: 167).

and the inherent inferiority and incompetence of the masses on the other.[12] Lipset (1981: 52) describes this perception vividly:

> The poorer the country and the lower the standard of living of the lower classes, the greater the pressure on the upper strata to treat the lower as vulgar, innately inferior, a lower caste beyond the pale of human society...Consequently, the upper strata in such a situation tend to regard political rights for the lower strata, particularly the right to share power, as essentially absurd and immoral. The upper strata not only resist democracy themselves, their often arrogant political behaviour serves to intensify extremist reactions on the part of the lower classes.

A related argument thus centers upon De Tocqueville's proposition that democracy is more easily established and maintained in societies where there is a greater 'equality of conditions' among the populace. Empirical evidence suggests that the emphasis should not be on income inequality alone,[13] but on the widespread enjoyment of basic health, education, economic security, etc (Barsh 1992: 133; Schmitz and Gillies 1992: 24-25). In other words, "the greater the equality of resources and power distribution, or of access to them, the better are the opportunities for fuller participation, and the more of it there is in practice"(Leftwich 1983: 265).[14] Quite clearly, one may readily substitute the term 'human development' into the above formulations.

The fourth basic approach, examining the role of external factors in creating a climate favourable for democratization, is too unwieldy for any substantive conclusions applicable to all developing states. "Foreign agencies do have a role to play in helping democracies form," Zarate argues (1994: 28), "yet the power to do so is constrained by the sets of conditions hindering or helping democratization within a country". One policy that

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[12]This argument is necessarily constructed largely on anecdotal evidence, since any attempt to conduct a study of such attitudes, regardless of the nature and size of the sample, must inevitably confront the problem of trying to find elites willing to go on record as questioning the rationality and wisdom of the average elector, whatever their private views. One such survey, however, was conducted by Moskos and Bell in the mid-1960s among political, economic and social elites in four emergent countries in the British Caribbean. The objective was to uncover elite attitudes towards democracy through a range of different questions. When asked to judge the competence of the average West Indian voter, 72% of the elites found the voter to be 'incompetent'. When asked whether the democratic form of government is best suited for the West Indies, the reviews were mixed: 50% said 'very suitable', 10% said 'partially suitable', and 40% said 'not suitable'. The authors concluded that: "the overall level of democratic - as opposed to authoritarian - beliefs and attitudes was not very high" (Moskos and Bell, 1965: 227).

[13]When the income inequality measure alone is used, it has been found that it "has no systematic effect on the level of democracy within countries...(However) if a democratic regime is inaugurated in a country with an extremely inegalitarian distribution of income, high inequality is likely to undermine the legitimacy of the regime and cause democratic institutions to be replaced by authoritarian rule" (Muller 1988: 50, 57).

[14]Vanhanen has undertaken to examine this argument empirically by employing a composite measure, which he calls the Index of Power Resources (IPR), to test a two-fold hypothesis: "(1) The relative distribution of economic, intellectual, and other power resources among various sections of the population is the fundamental factor that accounts for the variation of democratization; and (2) Democratization will take place under conditions in which power resources have become so widely distributed that no group is any longer able to suppress its competitors or to maintain its hegemony" (Vanhanen 1990: 50). Though not without its faults, which Vanhanen himself is quick to point out (1990: 192; 1992: 24-25), the IPR "was able to explain, statistically, about 70 percent of the variation in the (Index of Democratization)" (1990: 193). Following in the footsteps of Neubauer et al, Vanhanen then uses a modified version of the IPR (the IPR-ISI) to establish a 'threshold of democracy'.

has received much attention and criticism involves the linking of development aid to progress on human rights, democracy and, recently, 'good governance' (Munslow and Ekoko 1995: 159). Often referred to as 'political conditionality', its consequences are enormous:

> Behind such seemingly innocent measures is a potentially dramatic change of basic principles of the inter-national system: putting human rights first means that respect for individuals and individual rights acquires priority over respect for the sovereignty of states (Sorensen 1993a: 1).

Looking beyond such theoretical considerations, the main problem with this tendency is that it differentiates by ideology, and not by actual performance. The pressure to democratize is, therefore, sometimes misdirected.[15] Predictably, this policy is open to the same charges of cultural and ideological bias which accompanied those theories equating political development with democratization.

Though perhaps highlighting one approach in particular (level of socio-economic development, political culture, etc), most writers on democratic preconditions have tended to adopt an overall interpretation which incorporates elements of each approach. Setting aside some of the more deterministic attempts - those claiming to be able to predict the emergence of democracy using data for certain variables[16] - one may wonder how accurately these approaches, individually and collectively, reflect the *actual conditions* required for democracy to take root in developing societies. "For every factor seen as conducive to democracy," Sorensen (1993b: 27) argues, "counterexamples can be forwarded". Edwards (1994: 101) certainly adds his skepticism:

> General questions about democratization are unanswerable. The infinite variety of conditions, actually present or counterfactually posed, which might facilitate or impede such a process can only produce bewilderment.

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[15]Uganda is an excellent case in point. In the aftermath of the brutal and corrupt regimes of Idi Amin and Milton Obote, Yoweri Museveni assumed the reins of power in 1986. Under his direction, Uganda has experienced an economic boom (annual growth of 6% since 1987, making it the envy of the IMF) and much-neededsocio-political stability. Despite initial pressure from the West, Musevini has resisted holding multi-party elections, arguing that the West does not understand the 'subtleties' of African politics (ie. the vertical division along tribal lines). Owing to his successes, the West now appears to be acquiescing: "The bottom line," says one Western ambassador, "is that he is one of the few leaders on this continent who appears to care about his people and we therefore trust him to do the right thing". In return, Musevini is to hold elections for the constituent assembly where candidates must stand as individuals, thereby creating a 'no-party state'. Regardless, there is ample evidence to suggest that "so long as there's food on the table", Ugandans will allow Musevini to lead. (From "No Democracy Here, Please", *The Economist*, 29 May 1993; and "Musevini Takes Measured Route To Democracy", *The Independent*, 10 June 1993.)

[16]There are always inconsistencies with deterministic models, as Vanhanen (1992: 30) has found using his own variable (the IPRI-ISI): "According to the IPR-ISI, Kuwait, Bahrain, Thailand, Qatar, Iraq, and Guyana should (be) democracies. According to the IPR-ISI, Czechoslovakia, Bulgaria, Romania...Papua New Guinea, Madagascar and Haiti were not expected to be democracies...(The IPR-ISI) now predicts democratizationfor several Arab states in the Middle East".

Proponents of what may be called the 'strategic school' (Liu 1993) reject systematic preconditions outright. Using the metaphor of a complex 'chess game', O'Donnell and Schmitter (1986: 66) bring political actors into their analysis of possible transitions from authoritarianism to democracy: "Political democracy, then, usually emerges from a nonlinear, highly uncertain, and imminently reversible process involving the cautious definition of certain spaces and moves on a multi-layered board". Di Palma concurs: "New democracies are thus less the result of cumulative, necessary, predictable, and systematic development than of historical busts and booms, global opinion climates, shifting opportunities, and contingent preferences" (quoted in Zarate, 1994: 21). The debate over which sets of factors - 'structural/systematic' or 'conscious strategies' - most influence the process of democratization has not yet been fully resolved, despite some notable recent empirical attempts to discover the answer.[17]

2.2 The Humanist Approach

From Human Needs To Human Development: The Theoretical Backdrop

A normative political movement, hereinafter referred to as the *humanist approach,*[18] emerged in the 1960s and 1970s. Seeking to place human development at the forefront of their discipline, its proponents, political humanists, chastised their colleagues for losing perspective: "The increasingly fashionable concept of 'political development' has been left hanging in the air within authoritative political science literature, because the pluralist value-vacuum has barred any connection to human development" (Bay 1971a: 172).

Political humanists were strongly influenced by Abraham Maslow's landmark paper, *A Theory of Human Motivation* (1943), which proposed a hierarchy of human needs designed to take "account of the relative unity behind the superficial differences in specific desires from one culture to another" (Maslow 1946: 41).[19] Led by Christian Bay and J.C.

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[17]Vanhanen, for one, concludes that "64 to 70 percent of the variation in the degree of democratization is explained by systematic structural factors. This means that conscious strategies would account for a mere 30 to 40 percent variation at most" (1992: 5). He further assumes that once a certain level of development has been reached, "the significance of conscious strategies of democratization is highest" (ibid: 6). Looking at purely structural factors, Liu (1993: 97-98) finds that "economic development is the single most important factor which pushes a state to start a democratic transition...(but) after a transition is started, education and communication...are the most significant factors affecting the results of a democratic transition".

[18]This broad heading includes 'needs theorists', 'developmental ethicists', and any other individuals who contributed to the general tenets of the literature, as described in the following outline. The 'humanist approach', therefore, is a classification of convenience which embraces many different labels. Bay, for instance, sometimes referred to himself as a 'rational humanist': "humanism here will refer to the orientation that is committed to a human rights order based on basic needs priorities, and rational means being ready to question all related assumptions, possibly excepting the commitment to the supreme inherent value of every human" (Bay 1990: 241).

[19]Although Maslow provided the necessary conceptual framework, one could trace the spirit of this literature at least as far back as the early writings of Marx and Engels, who wrote in 1846: "life involves, before everything else, eating and drinking, a habitation, clothing and many other things (and) that as soon as a need is satisfied..., new needs are made" (quoted in Davies 1977a: 159).

Davies, a generation of theorists embraced Maslow's resulting model of human development as a new standard of comparison.

Much of the humanist literature is devoted to establishing the moral case for human development, which involves, in the first instance, resolving the highly abstract 'needs versus wants' debate in favour of the former. Whereas a *want* refers to "any demonstrable predisposition to desire or prefer something, whether expressed in words or nonverbal behaviour"(Bay 1977: 2), a *need* refers to "any behaviour tendency whose continued denial or frustration leads to pathological responses" (Bay 1968: 242).[20] We may all *want* different things, but we all "share our most basic needs categories" (Bay 1990: 246). Generally speaking, therefore:

> The attempt to mark off needs from wants is one version of the ancient distinction between Nature and Convention. The securing of needs is held to be natural, proper human activity whereas the securing of wants is merely conventional, artificial or 'socially determined' activity (McInnes 1977: 229).

The corresponding assumption, which itself carries profound implications, is that "needs are objective and in principle quantitative, while wants are subjective and ephemeral, liable to ebb and flow in rhythm with satisfactions" (Bay 1965: 48).[21] If only 'needs' can be objectively quantified, it is both meaningless and methodologically unsound for political scientists to try and measure 'wants':

> the bulk of political behaviour research has dealt directly with want priorities...Simple accounting or scale-measurement studies of opinions, attitudes, beliefs and voting behaviour will not help much toward understanding basic needs (Bay 1977: 13-14).

Making "no reference to the public good", such efforts may be dismissed as being "pseudopolitical" (Bay 1965: 40). As Doyal and Gough (1984: 11) correctly argue:

> when goals are described as 'wants', it is precisely because they are *not* regarded as universalisable...(that is), they are not linked directly to the achievement or maintenance of some aspect of the human condition which is accepted as normal and necessary for everyone... (Furthermore,) unlike needs, wants are always thought of as perceived goals which are justified by reasons that have little to do with more general beliefs about the human condition.

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[20]McInnes (1977: 235) counters that it is often difficult to draw political conclusions from this distinction: "...the suppression of nefarious wants can encounter more political opposition than the denial of 'basic needs'. Napoleon I had more trouble curbing illicit distilling, or Khruschev the abuse of vodka, than either had in denying their subjects 'basic needs', whether for personal integrity or food".

[21]The objective/subjective divide is a common theme. McInnes (1977: 231) remarks: "Needs are at one and the same time objective facts and the criteria or norms of mental health, and therefore the norms of a healthy society, one where policy is addressed to their satisfaction". Moreover, Fromm argues that the 'sane society' is that which: "corresponds to the needs of man, not necessarily to what he feels to be his needs - because even the most pathological aims can be *felt subjectively as that which the person wants* most - but to what his *needs are objectively*, as they can be ascertained by the study of man" (in Fitzgerald 1977a: ix).

Accordingly, the concept of 'wants' does not have any value for cross-national research; a point well illustrated by the inherent deficiencies of Quality of Life studies.[22] An objective assessment of the human condition across nations can only be made by measuring levels of needs satisfaction, or human development.

But what exactly are the 'needs' which humanists believe we all share? Speculation about human nature is as old as the study of politics itself; indeed, one cannot understand the latter without some reference to the former. While many theorists have, in the process of trying to describe human nature, compiled their own classifications of human needs, none have been more influential than Abraham Maslow. Described as "the most elaborate and currently most popular model of man", Maslow's hierarchy of human needs is predicated on the conviction that "man is neither a behavioural sponge (as behaviourists would have it) nor a tormented neurotic (as the Freudians hold), but a natural innocent (shades of Rousseau) who is endowed with an array of biologically based needs that ascend hierarchically..." (Corning 1977: 47). In ascending order of priority, these are: (1) the physiological needs (water, food, shelter, etc); (2) the safety needs (predictability of environment, sense of security); (3) the belongingness needs (affection, identity, etc); (4) the self-esteem needs (sense of personal worth, equality); and (5) the self-actualization needs (self-realization).[23]

Unlike the more ad hoc lists produced by other theorists, Maslow's model contains a sense of sequence and priority:

> Human needs arrange themselves in hierarchies of prepotency. That is to say, the appearance of one need usually rests on the prior satisfaction of another, more prepotent need. Man is a perpetually (needing) animal. Also no need or drive can be treated as if it were isolated or discrete; every drive is related to the state of satisfaction or dissatisfaction of other drives (Maslow 1946: 22-23).

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[22]By using attitude surveys and questionnaires, Quality of Life (QoL) studies simply record people's degree of satisfaction with various aspects of their lives. Aside from the technical difficulties with such approaches in general (UNESCO 1983: 20-22), there are methodological inconsistencies with QoL studies which cannot be overcome for cross-national studies: "(1) the stability of *meaning* across the groups being compared; (2) the possibility that the amounts and patterns of errors in one's data may vary systematically from group to group, or from time to time; and (3) the impact of using different methods in the various groups to collect the data" (Andrews 1980: 278-279). Moreover, one inevitably encounters the conceptual problem that "rich nations do not necessarily show higher levels of subjective well-being than relatively poorer ones" (Inglehart and Rabier 1986: 2). This phenomenon has been confirmed by Gallup (1976: 467) and Cantril (in Hankiss 1980: 51). Cantril's findings in particular show that, despite having only 25% of Japan's 'developmental index' score, Egypt ranked higher on a 'mean self-ratings on ladder scale'. Finally, although some writers have attempted cross-national samples of basically 'similar' groups of countries (Andrews and Inglehart 1979), it is acknowledged that people in different societies do not think about 'well-being' in similar ways, thus undermining any common basis of comparison.

[23]Even the most diverse classifications of needs may be either traced to, or placed within, Maslow's framework. In a famous study which served as the basis for his surveys of 'welfare' and 'levels of living' in Scandinavia (Miles 1985: 159), Allardt (1973) proposes "three basic welfare values" common to everyone: Having (Maslow's Physiological and Security needs), Loving (Maslow's Belongingness needs), and Being (Maslow's Self-Esteem and Self-Actualization needs). Whereas Doyal and Gough (1984) choose to divide their "Abstract Universal Needs" into Individual Needs (Survival/Health, Autonomy/Learning) and Societal Needs (Production, Reproduction, Culture/Communication, Political Authority), Weigel (1986) focuses on three "Core Attributes of Human Life" - Existence, Intelligence and Sociality. With some creative tampering, both classifications could be reworked into Maslow's hierarchy.

Not wishing to be misunderstood, Maslow makes two important clarifications. To begin with:

> (the hierarchy) is not nearly as rigid as we may have implied...(T)here have been a number of exceptions....(Some) people who have been satisfied in their basic needs throughout their lives, particularly in their early years, seem to develop exceptional power to withstand present or future thwarting of these needs simply because they have strong, healthy character structure as a result of basic satisfaction (Maslow 1946: 37-39).

Furthermore, one should not be under the false impression that:

> a need must be satisfied 100 per cent before the next need emerges. In actual fact, most members of (Western) society who are normal are partially satisfied in all their basic needs and partially unsatisfied in all their basic needs at the same time...If I may assign arbitrary figures for the sake of illustration, it is as if the average citizen is satisfied perhaps 85 per cent in his physiological needs, 70 per cent in his safety needs, 50 per cent in his (belongingness) needs, 40 per cent in his self-esteem needs, and 10 per cent in his self-actualization needs (Maslow 1946: 40).

While some theorists have embraced Maslow's model wholeheartedly, others have offered some slight modifications.[24] But while it may perhaps be tempting to criticize certain aspects of the model (Doyal and Gough 1984), or its abstractness,[25] one should not lose sight of its overall relevance: "what this line of inquiry promises...is a deductive system based on very few and widely accepted value premises: that maximal health and maximal development of intercompatible human potentialities are supremely desirable" (Bay 1970: 12). Who can argue, for example, that "physical sustenance, safety, affection, self-esteem, and self-development *are not* prerequisites or crucial aspects of human welfare" (Bay 1968: 247)? As Renshon (1977: 57) observes: "(Maslow's hierarchy) offers an attractive compromise between the requirement to fully specify the widest variety of human motives, and the practical theoretical necessity to have a useful framework for political analysis".

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[24]Two arguments in particular are worth noting, both focusing on the issue of instrumentality. Bay argues that the need for perceived personal freedom - "the sense of efficacy or power to influence the course of one's life" (Bay 1977: 8) - should be added to Maslow's hierarchy between the needs for 'belongingness' and 'self-esteem'. Since "freedom is the soil required for the full growth of other values" (Bay 1970: 19), Bay places it fourth in his expanded model of six categories. Davies (1963: 9) considers Maslow's second category of safety/order needs as instrumental for the realization of the other needs. In his own model, he groups the safety/order needs together with two new instrumental categories of needs (for power and knowledge), thus making a distinction between 'instrumental' and 'substantive' needs (the remaining four categories in Maslow's hierarchy): "Each (instrumental need) relates to each of the substantive needs. Independently they do not appear to have any priority in relation to one another: knowledge does not precede power, security does not precede knowledge, and so on. But each of the instrumental needs acquires priority as it becomes linked or attached to a substantive need" (Davies 1977a: 168).

[25]Knutson's (1972: 103) plant analogy helps to clarify this abstractness: "as with each human personality, each bud is formed with the possibilities of development into a perfect, whole flower, but first it must successfully bypass the vicissitudes of life which may blight its development. If the bud is attacked by insects, disease, et cetera, it may continue to unfold somewhat, but it will never become the perfect flower which it inherently could have been: it will always (even after professional intervention) bear evidence of its earlier deprivation. Finally, just as only the bud which has successfully reached the stage of full

Maslow's hierarchy has certainly influenced the explanation offered by humanists for why democracy corresponds to higher levels of development. Since the relative saliency of specific needs defines the level of human development, it follows that democracy is more valued, and therefore more likely to take root and persist, in countries where lower-order needs (subsistence, order/stability) have largely been met and where higher-order needs (equality/self-esteem) are most salient.[26] By now this idea has become widely accepted among contemporary political scientists:

> There are several reasons why democracy is so closely related to the physical quality of life. First, these conditions generate the circumstances and skills that permit effective and autonomous participation. Second, when most of the population is literate, decently fed and sheltered, and otherwise assured of minimal material needs, class tensions and radical political orientations tend to diminish...Third, human beings appear to frame their values at least partly in response to *what the psychologist Abraham Maslow termed a 'hierarchy of needs'*...Thus while the satisfaction of lower-order needs does not automatically increase the salience of individual needs for political freedom and influence, it makes the valuing of those needs more likely (Diamond 1992: 486-7; emphasis added).

In the most underdeveloped countries, where most people are preoccupied with merely staying alive (i.e., satisfying Maslow's first category of physiological needs), the instrumental value of democracy is suspect, for while "a momentary worsening of the food supply may produce local food riots...extreme hunger, as starvation approaches, produces apathy and manipulability" (Davies 1963: 15). Nor does the intrinsic value of democracy matter for someone suffering from severe physiological deprivation: "if people starve, it is nonsense to expect them to care for free speech except, at most, as a means to articulate their demand for food" (Bay 1970: 15). Given the choice, and forced to choose, a starving man will choose bread instead of the ballot.[27]

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development is considered to be whole and wholesome, so the human personality which, having its earlier needs met is able to develop to its fullest potentialities, (has) fully attained the level of mental health".

[26]This argument is central to the humanist conception of political development, in which a 'politically developed' country is one found at relatively high levels of human development. In other words, human development conditions determine the degree of political development (Davies 1977a; Park 1984; Pennock 1966). A very elaborate and highly theoretical interpretation is given by Davies (1977a; 1977b). Shunning conventional labels, he proposes five stages of political development: primitive anarchy, anomic anarchy, oligarchy, democracy and civilized anarchy (1977a: 190). Countries may therefore be placed on a continuum from the stage of 'primitive anarchy', where most people are burdened with trying to meet their physiological needs, to the stage of 'civilized anarchy', where people have satisfied their lower needs to the extent that the pursuit of self-actualization needs become their paramount source of motivation.

[27]The German saying "first comes food, then morality" (Davies 1977a: 158) is echoed in Africa as "Human rights begin with breakfast" (Streeten 1981a: 369). These arguments are certainly not confined to the humanists. Galbraith argues that: "if people are hungry, ill-clad, unsheltered or diseased, nothing is so important as to remedy their condition...It will be time to worry about leisure, contemplation, the appreciation of beauty and other higher purposes of life when everyone has had a decent meal" (quoted in Goulet 1971: 238). Tellingly, in his wide-ranging survey of attitudes in post-colonial Africa, Cantril (1961: 7) found that: "among some of the poorest people in black Africa who have long been subjugated by the white man, the problem of racial discrimination itself has scarcely emerged in their consciousness, so desperate are they to find enough for their families to eat that day and the day after".

Democracy is also of little value (intrinsic or instrumental) in conditions of extreme insecurity, where the collective need for stability/order - social , economic and political - becomes paramount. Few Peruvians, for example, flinched when President Fujimori assumed dictatorial powers in the early 1990s to combat the severe socio-political violence unleashed by the Shining Path guerrillas. A sense of security is also characterized by the degree of environmental predictability, or "the actual and perceived probability that levels of need-satisfaction achieved will continue in the foreseeable future" (Bay 1968: 249). Following the harsh initial years of market reform in post-1989 Eastern Europe and Russia, the knee-jerk reaction among voters was to seek solace in the predictability of the past.[28] Indeed, the need for predictability is so great that its continued absence is likely, in extreme cases, to lead to socio-political rebellion, as Davies' famous J-Curve Model suggests: a revolution will occur when progress is perceived to be blocked or reversed; that is, when an intolerable gap emerges between what people expect to receive and what they actually do receive from society (Davies 1962: 6).

The question of national identity corresponds to society's collective need for what Maslow called 'belongingness'. The significance of this concept is easily understood: "(people must) develop a sense of community - of a common identity that makes possible joint political action" (Davies 1963: 61). The forging of a collective identity, vital for ensuring a sense of national cohesion, therefore precedes deliberations over regime-type, since "'What is my nation?' must be answered before 'What kind of nation?'" (Verba quoted in Nordlinger 1970: 333). If a sense of national unity/purpose is not first established, especially in less developed societies which are highly polarized along ethnic/cultural/religious lines, 'tribal' allegiances will almost invariably impede the functioning of whatever democratic practices and mechanisms may be in place. To cite the most obvious example, recent democratic experiments in Africa - which, for the most part, arose from external, not internal pressure - have shown that, with voting patterns strictly following tribal/ethnic lines, elections are little more than contests between rival tribal groups for political power, the spoils of which flow disproportionately back to the winning group; and hence the calls (from Musevini in Uganda, among many) for a form of 'no-party'

[28] "Democracy is good, but sausages are better" was a typical comment of the time (Russian worker quoted Dec. 1991 in Vanssay and Spindler, 1994: 359). Throughout Eastern Europe, the governing parties responsible for implementing the initial market reforms were voted out of office, replaced by 'reformed Socialists' who pledged to slow the pace of change; recently, of course, the market-reformers have made a comeback. Many Western observers were taken aback by the widespread support for the extremist politician Zhirinovsky during the 1993 Russian Federal Election. That he campaigned against the rapid changes which had disrupted 'the old way of life' served him well, which should not have been surprising: the Russian State Statistics Committee found that 32% of families lived below the official poverty line; that 45% of those with children under the age of six were poor; and that 68% of pensioners had monthly incomes below $90 (cited in the Toronto Star, 19 December 1993). The widespread insecurity was also reflected in the enduring popularity of the Communist Party, which consistently topped opinion polls as the party of choice and was the dominant force in the Duma during the first half of the 1990s.

democracy to reflect 'African political realities'. Even in more sophisticated democracies such as Mauritius and Malaysia, votes are primarily cast along ethnic/religious lines.[29]

Democracy therefore becomes more *meaningful*, and thus more likely, once basic lower-order needs - for a decent level of subsistence, a secure/predictable environment, and a sense of collective (national) identity/purpose - have largely been met and when higher-order needs become most salient. Indeed, many political scientists (Cantril 1967; Gallup 1976; Ingham 1993) concur with the view that: "societies that are more highly developed economically and socially also tend to place greater value on political participation...It thus acquires value as a goal in and of itself..."(Huntington and Nelson 1976: 160).

Two landmark studies of global attitudes appeared to confirm this proposition. Cantril's eight-year survey of 14 countries concluded that:

> the vast majority of people's hopes and fears revolve around the complex of personal well-being as it is rather simply and genuinely defined: a decent standard of living; opportunities for children (etc)...But the concern for greater social justice, more freedom, better moral standards...appears to be the conscious concern of only a tiny minority of people throughout the world...(T)here is little concern for ideology as the term is commonly used: *few people are basically interested in concepts such as democracy, socialism, communism, or capitalism as such...* (Cantril 1967: 145; emphasis added).

Almost one decade later, Gallup's research into 60 countries produced similar results:

> Economic well-being plays a far more important role in the hopes of those who live in the developing nations. Jobs, a higher standard of living, the chance to own a business, a farm or land, and to have 'wealth'...take precedence over everything... Such things as 'self-development', 'public service',...the 'desire for peace and a better world', seldom mentioned by those in developing nations, are often cited by those in developed nations (Gallup 1976: 465).

Again, an explanation may be found in Maslow's theory of individual motivation: people whose higher-order needs are most salient are, by and large, the ones most interested in politics as observers and participants. "To be treated as an equal, at least politically, would seem a prerequisite for dignity...," Bay argues (1968: 250), "(and) there is a great symbolic and psychological value in having this power in principle".[30] Davies (1959: 415)

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[29]These two 'developmental democracies', to use Leftwich's label (1996), will be looked at in Chapter 7. In each case, the need to establish a national consensus prompts the formation of a multi-ethnic coalition after every election, thereby serving to diffuse any possible ethnic tension which might otherwise arise. The constantly-changing nature of coalitional government in Mauritius reflects both the usual inability of any one dominant party from gathering enough votes to govern alone, and the generally accepted policy of trying to represent all communities. The BN coalition which has governed Malaysia since 1969 consists of the dominant United Malay National Organization and several other parties, including ones representing the Chinese and Indian communities. The Malay-Chinese race riots of 1969 forced political leaders to seek a more consensual form of democracy.

[30]The distinction between power in *fact* and power in *principle* was consistently drawn in the early humanist literature. In the tradition of C. Wright Mills (1956), many argued that, given the lack of any real (popular) accountability of political elites, modern liberal-democracy is a 'sham'. More cynical observers would find some merit in this supposedly shambolic front, arguing that the ritual of voting serves other purposes (maintaining social cohesion, giving at least the 'illusion' of popular empowerment, etc).

adds that: "the only factor which appears to be a reasonable postulate for common motivation of intense political participation by the 1 or 2 percent (of the population) is the need for self-realization". Since becoming the subject of considerable political analysis in 1950s and 1960s, this hypothesis has been consistently confirmed.

The University of Michigan's influential study of the 1952 U.S. Presidential election found that: "People with the highest income...and the most education almost without exception are the ones who vote most regularly and frequently and who express the belief that voting is worth the trouble and that they have an obligation as citizens to do so" (Davies 1959: 413). In their own study, Huntington and Nelson (1976: 43) came to a similar conclusion: "those with more education, more income, and higher-status occupations usually participate more than those who are poor, uneducated and in low-status occupations". Almond and Verba (1989: 193) also found that individuals with a higher sense of 'subjective competence' - or belief in their own ability and power to 'make an impact' - almost invariably express the greatest satisfaction with their voting participation.

Furthermore, examining the differences between the 'voter' and the 'non-voter', Hastings (1956: 304-306) found that the latter generally has a significantly higher "degree of social withdrawal and immobility", a lower "level of information", and comes predominantly from the lower economic strata. Regarding the question of political apathy/ awareness, Rosenberg (1954: 362) observed that: "...for many people the relatively abstract, impersonal, serious, and often complex, subject matter of politics cannot compete successfully with the simple, personal, emotional appeal and excitement of kidnapping and sports and more entertaining subjects of the mass media".[31] One extensive survey conducted in the early 1960s found that:

> of the approximately 100,000,000 adults in the U.S., 50 million of them do not know who Nehru is; 50 million cannot correctly identify Charles de Gaulle; 20 million think Russia is a member of NATO; while 20 million just don't know one way or another. But 85 million do know about Marilyn Monroe and 80 million can identify Mickey Mantle (Cantril 1961: 44).

Though certainly not justifying the outrageous claims made by elite theorists of the 19th century,[32] some argue that, by investigating issues such as political motivation and

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[31]There are, it should be stressed, other reasons for political apathy, as Rosenberg (1954: 366) himself noted: "...some people are apathetic because they feel there is no need to do anything; they are contented with the social and political system, have faith in their representatives, and see no need for change. This basic contentment tends to be linked with a confidence in the basic stability of the society". Likewise, Morris-Jones (1954: 37) wrote that: "A State which has 'cured' apathy is likely to be a State in which too many people have fallen into the error of believing in the efficiency of political solutions for the problems of ordinary lives".

[32]Fearing the impact of 'mass society' on the democratic process, Le Bon remarked: "The elector stickles in particular for the flattery of his greed and vanity. He must be overwhelmed with the most extravagant blandishments, and there must be no hesitation in making him the most fantastic promises...(which) produce a great effect, and... are not binding for the future, (since) the elector never troubles himself to find out how far the candidate he has returned has followed out the electoral programme he applauded, and in virtue of which the election was supposed to have been secured"(Le Bon 1896: 202-203).

awareness, modern social science appears to have contributed "systematic, scientific evidence of human behaviour to discount factual truth to the classical democratic faith in the rationality, good will, and general competence of the average man" (Meyer 1974: 199). Whatever one's opinion on this specific point, it is hard to disagree that:

> Participation (for the majority of people) is not an inherently satisfying experience but rather an activity in which they engage to insure their basic security in such things as food, clothing, shelter, health and physical safety...or to give them a sense of belonging to some social group other than family, church, union or fraternal lodge. *For most people politics is quite instrumental* ... (the paradox of course is that) those who are most active in politics are not those who by objective judgement are most in need of security and a greater sense of belongingness (Davies 1959: 410-413; emphasis added).

Overall, therefore, the humanist approach establishes a theoretical basis for relating democracy to human development. Interestingly, it also provides a theoretical context in which to interpret many of the 'democratic preconditions' postulated in the more traditional approaches. There is agreement that democracy is typically the by-product of development. But whereas traditional views often focus on the level of socio-economic development, humanists consider the level of physiological needs. The same treatment may be applied to some of the other broad concepts: political culture underpins the collective need for belongingness/identity; socio-political cleavages expose the collective needs for self-esteem and equality; and political development theory's preoccupation with stability and order ties directly to the collective needs for safety and security.

The Instrumentality of Politics

Believing in the instrumentality of politics, political humanists argue that governments should be evaluated by what they do (in the area of human development) and not by what they claim to be (whether democratic or not). Rather than embracing democracy as the best form of government in *all circumstances*, humanists claim that democracy is the best form *when and where it works*: "a political system that fails to provide basic security or to provide - or to enable the economy to provide - minimum subsistence cannot be judged highly developed no matter how much liberty it succeeds in guaranteeing" (Pennock 1966: 426). What matters is not regime-type but political effectiveness:

> ...to protect and expand Most Basic Rights is the only legitimate purpose of government, or of politics; every law and institution should be judged as a means to further this end...(These rights) are to remain (1) alive, (2) unmolested, and (3) free to develop according to inner propensities and potentialities (Bay 1971b: 217-218).

Likewise, Pennock (1966: 420-426) argues that a state must be judged by its ability to "deliver political goods", which consist of: (1) order; (2) welfare; (3) justice; and (4) liberty. Lane and Ersson (1993: 193) concur:

> The famous slogan from the French Revolution - Liberte, Egalitie and Fraternite - may be interpreted as an attempt to define the principal-agent problem in politics. Any government should pursue these principles in order to be legitimate to the population.

A government's effectiveness is therefore measured by how well it improves human development conditions, whereas its legitimacy rests upon its degree of effectiveness (Bay 1977: 1).[33]

Accordingly, a democratic government may or may not be effective and/or legitimate. Since "people cannot eat the constitution" (Davies 1977a: 171),[34] democracies, like other political systems, must be judged by their instrumental merit. Otherwise, there is the danger of confusing means and ends, as external trappings become valued for themselves:

> ...a need-based conception of democracy... rejects the notion that the value of the democratic method is fulfilled by Bills of Rights, competitive elections, legal and institutional guarantees of the citizen's right to appeal to his leaders, majority rule, rights of opposition, and so on. In effect, it demands that what may be necessary conditions for democracy should not be seen as sufficient (Meyer 1974: 211).

This humanist view of democracy is thus at odds with traditional democratic ideology, in which "not the sanctity of life but the preservation of a political system, or 'way of life', becomes the end" (Bay 1971b: 155-156). Expressed differently:

> Democrats, as believers in voting, must emphasize responsiveness to popular wants as a primary legitimation principle. A primary commitment to human rights, on the other hand, requires a different kind of legitimation, for a human right cannot in principle be validated or invalidated by popular votes (Bay 1990: 237).

The belief in the instrumentality of politics was shared by humanists and political development theorists alike. Both groups also recognized that politics is an elitist exercise. But whereas the latter displayed a 'conservative elitism' concerned with issues of stability and institutionalization (Cammack 1994a: 369), the former advocated a 'radical elitism', or

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[33]This argument may be expressed in sociological terms: "one may refer to a social condition as *authentic*, when the appearance and the underlying structure are both responsive to basic human needs; as *alienating*, when both the appearances and the structure are unresponsive; and as *inauthentic*, when the underlying structure is unresponsive but an institutional or symbolic front of responsiveness is maintained" (Etzioni 1968: 881).

[34]Vanssay and Spindler (1994: 361) provide an empirical dimension to this argument by studying "whether inclusion...of an explicitly named right in a written constitution has any effect on residents' economic welfare...". Not surprisingly, they conclude that "the entrenched elements of 'political structure', 'protections from tyranny', or 'social charter' are not revealed as important explanatory variables. Indeed, the results suggest that 'actions speak louder than words'..." (ibid: 365).

'militant humanism' aimed at improving the human condition (Bay 1971b: 157). Quite often, this advocacy led critics to assume that an authoritarian streak underlined the humanist message, since the question inevitably arises: Who is to determine what society's 'needs' are, if democratic elections are merely expressions of 'wants'? As Flew (1977: 217) recognizes, it is possible "to endow the notion of needs with much charm for anyone longing to belong to an authoritative and powerful paternalistic elite".[35]

While this observation may be true in a narrow sense, and is readily admitted by humanists themselves (Bay 1977: 3), it obscures a distinction which must be made:

> It is important to acknowledge that for anyone to claim that he knows someone else's human needs is for the former to assume an authoritative relationship toward the latter. But this is not enough to make the first authoritarian (Kaufman 1971: 197).[36]

Parents are justified in assuming that they 'know better' when forcing their children to eat their food (for their 'own good'). We visit doctors because we assume, quite correctly, that they are in a better position to determine what ails us (and may prescribe treatment accordingly). Hence, one should not fall "into the absurdity of denying that (some people) know more than we do about some of our needs" (Watt 1982: 541).

But where does one draw the theoretical line between 'good' or 'bad' paternalistic interventions? Kleining makes a distinction between two sets of dichotomies - positive and negative, strong and weak - and proceeds to outline whether or not a paternalistic imposition may be justified:

> In general, negative paternalism (where X's rationale for acting is based on a concern to protect Y from some harm) is to be preferred; (2) In general, the 'weaker' the paternalism (where X's act is based on the relative unlikelihood of Y being able to select a particular good for himself), the more likely it is that it can be justified; (3) In general, the more serious the detriment to welfare, the more likely it is that paternalism will be justified; (4) In general, the higher the risk involved the more compelling the case for paternalism; and (5) In general, the more difficult it is to repair the harm or detriment, the more likely it is that paternalism will be justified (Kleining in Weigel 1989: 75-76).

Two basic assumptions may be derived from this framework. First, developed countries have a moral obligation to help alleviate needs deprivation in developing countries, irrespective of whether or not any assistance is actually asked for by their governments (Doyal and Gough 1984: 22); which, owing to plain indifference to the welfare of their

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[35]Consider a speech made in 1957 - with the memory of the Hungarian Uprising still lingering - by the Hungarian leader, Janos Kadar, in front of the National Assembly: "The task of the leaders is not to put into effect the wishes and will of the masses...The task of the leaders is to accomplish the interests of the masses. *Why do I differentiate between the will and the interests of the masses?* In the recent past we have encountered the phenomenon of certain categories of workers acting against their interests" (quoted in Flew 1977: 214).

[36]Bay (1970b: 4), for instance, calls freedom of expression the "supreme political value". Just how 'authoritarian' can he be?

people, nationalistic pride, or any other reason, may be reluctant to accept 'outside intervention'. Though highly controversial, and open to a number of interpretations - ranging from direct military intervention to making foreign aid contingent upon verifiable human development gains - the call for such a strongly-enforced benevolent policy, where action is taken for the benefit of the most disadvantaged people, is certainly not the same as advocating colonialism or imperialism, where societies are subjugated for the benefit of the colonial power. Second, political leaders have a moral obligation to try and improve the lives of their fellow citizens, using means which may be either democratic (where possible) or non-democratic (where necessary). This brings up the interesting case of Singapore: whereas political development theorists would applaud its benevolent/paternalistic leadership for creating a strong institutional framework to "maximize order and (economic) development", to use Apter's (1971) phrase, political humanists would applaud the tremendous human development gains made over the past decades (Chapter 7).

Because the earlier political humanists did not focus on regime-type distinctions, they never directly engaged in the debate over which form of government is most likely to rapidly propel a developing country to a higher plateau. But it was assumed that, prior to reaching the stage where democracy could truly become meaningful to the majority of a country's inhabitants (i.e. once lower-order needs were satisfied), some form of 'oligarchic' rule would be necessary. This theme, though not sufficiently developed in the humanist literature, was touched upon by Davies (1977b: 92):

> ...the criterion for saying whether a capitalist or socialist economic system is more appropriate is its efficiency in creating an abundance of goods, not who controls the system. In either case, the system will be controlled by an elite that is not institutionally accountable to the public it professes to serve. Oligarchy, in short, seems to be inevitable in societies that are commencing intensive economic development and broad social integration.

Like political development theorists (and other proponents of the Conflict Perspective), political humanists therefore assumed that democratic governance could not be maintained during a period of rapid socio-economic change. In a sense, then, democracy would have to wait: increased material prosperity usually leads to a corresponding improvement in human development conditions (Chapter 7), which, in turn, increases the possibility that democracy will be established at a future stage.

CHAPTER 3
MEASURING DEMOCRACY AND HUMAN DEVELOPMENT: CONCEPTS AND VARIABLES

This chapter, divided into two parts, describes the variables to be employed in the empirical analysis in succeeding chapters. Section 3.1 discusses my political measure, the Level of Democracy Index (LoD), whereas section 3.2 outlines my measure of human development, the Integrated Human Development Index (I-HDI), and its constituent indices.

3.1 Measuring Democracy: The Level of Democracy Index (LoD)

Measures of Democracy

"So fluid, complex, and subjective a thing as democracy," one scholar wrote, "cannot be weighed on a grocer's scales or even on a laboratory balance with complete accuracy and satisfaction" (Fitzgibbon 1956: 619). To some extent, this sentiment reflects why no one particular index of democracy has emerged as the undisputed standard of measurement. Indeed, there are many such indices for scholars to choose from (for good summaries of existing indices of democracy and their relative merits see: Bollen 1986, 1990; Sirowy and Inkeles 1990; Inkeles 1990; Vanhanen 1984, 1990). Table 3.1 summarizes some of the better known indices available for cross-national, time-series studies. There are certainly other measures worth noting, but their unavailability in widespread time-series formats prevents their inclusion in the table.[1]

[1]Here are but a few such measures. Bollen's (1980) index of political democracy focuses on two points in time (1960, 1965) for 113 countries, and uses the following criteria: press freedom, freedom of group opposition, government sanctions, fairness of elections, executive selection and legislative selection. Moore (1995) acknowledges the merits of this index but laments its lack of contemporary data, while Weede (1983) and Moon (1991), among many others, have chosen Bollen's index as the political measure in their respective empirical studies. Jackman's (1973) index of democratic performance covers the same period as Bollen's but is not as widely used. Available for 60 countries, this measure contains four dimensions: number of adults voting, competitiveness of party system, electoral irregularity and freedom of the press. More recently, Coppedge and Reinicke's (1990) Polyarchy Scale is derived from four criteria: freedom of expression, freedom of organization, media pluralism, and the holding of free elections. The authors allocate corresponding scores to 170 countries for 1985. Hadenius (1992) constructs a democracy index for 132 countries. Though available for only one date (c1988), this index has been duly acknowledged and cited (Moore 1995: 6; Lane and Ersson 1994: 101). Desai's (1994) Political Freedom Index is constructed from five 'clusters': integrity of the self/personal security, rule of law, political participation, freedom of expression, and equality before the law. Based largely on work the author did for the 1992 Human Development Report, Desai's index is available for 101 countries (c1992).

Table 3.1 Comparing Several Indices of Democracy

Index	Components	Time-Series	Sample(N)
(1) Cutright's index of political development	-legislative branch of government -executive branch of government	1940s-60s	77
(2) Vanhanen's index of democratization	-competitiveness of party system -electoral participation	pre1960s-1970s, 1980-88	119, 147
(3) Humana's index of human rights	-several different measures of human rights	1980s	96, 98
(4) Gastil's index of political rights	-several different criteria from political rights 'checklist'	1972+	167+
(5) Gurr's index of political authority	-competitiveness of participation -regulation of participation competitiveness of exec. recruitment -openness of exec. recruitment -constraints on chief executive	pre-1960s-1986	155

A suitable measure for this study would have to meet three criteria: (1) conceptual suitability, and availability in both (2) time-series (1970-90) and (3) cross-national (123 countries) formats. From the table, only those constructed by Vanhanen, Gastil, and Gurr seem to satisfy these criteria. But since Gastil and Gurr cover very similar conceptual terrain (Lane and Ersson 1994: 101), and given the very high degree of correlation between their indices,[2] it is appropriate to select one at the expense of the other. Accordingly, Gastil's index has been selected over Gurr's because it is more accessible, as values are presented on an annual basis for the exact period of this study, and because it is much more widely accepted and employed by other researchers. We are therefore left with Gastil's Political Rights Index (PRI) and Vanhanen's Index of Democratization (ID).

Since these two indices differ significantly, both conceptually and methodologically, one should not be directly substituted for the other, despite the fact that they are highly correlated.[3] As will be demonstrated below, it is primarily because of these differences that

[2]The correlation coefficients are: .86 for 1973 (N=124); .87 for 1980 (N=128); .89 for 1985 (N=128); and .91 for 1986 (N=128). Source: Appendix 5.1 in Lane and Ersson 1994, p.100.

[3]Lane and Ersson (1994: 100) find correlation coefficients of .82 for 1980 (N=128) and .87 for 1988 (N=128). For his sample of 147 states for the period 1980-88, Vanhanen (1990: 25) himself observes correlations ranging from -.811 (1980) to -.870 (1985). Using as my sample the 123 countries in this study, I have found the following correlations between the PRI and ID:

Point Measures	Period Measures
PRI 1972 with ID 1960/9: -.776	PRI 1972/79 avg with ID 1970/79: -.874
PRI 1979/81 avg with ID 1970/9: -.787	PRI 1980/91 avg with ID 1980/88: -.868
PRI 1989/91 avg with ID 1980/88: -.831	PRI 1972/91 avg with ID 1970/88: -.876

it is desirable to keep both, merging them into one composite measure. Before doing so, each index should be briefly outlined.

Gastil has been allocating PRI values in Freedom House's *Freedom in the World* surveys annually since 1972. Virtually every country is accorded a PRI value from 1 (greatest/most political rights) to 7 (lowest/fewest political rights). This seven point scale is based upon the following checklist (Gastil 1990b: 30):

1. Chief authority recently elected by a meaningful process.
2. Legislature recently elected by a meaningful process.
3. Fair election laws, campaigning opportunity, polling and tabulation.
4. Fair reflection of voter preference in distribution of power.
5. Multiple political parties.
6. Recent shifts in power through elections.
7. Significant opposition vote.
8. Free of military or foreign control.
9. Major group or groups denied reasonable self-determination.
10. Decentralized political power.
11. Informal consensus; de facto opposition power.

Two broad criticisms are most often directed against Gastil's index: (1) it is based solely on subjective interpretations; and (2) the evaluations themselves are, in turn, unduly influenced by Freedom House's conservative ideological streak (Scoble and Wiseberg 1981; Bollen 1986). Discarding claims of ideological and personal bias outright, Gastil himself admits that "with more adequate resources, the survey could be made less superficial" (Gastil 1990b: 26). However, he adds in his defense:

> The unevenness of the sources of available information over time and its incompleteness has never been a major reason why the survey never acceded to the occasional suggestion that a more objective system be devised in which many subindicators would be rated numerically, and then summed up for an overall rating. Intuitively, and after trying a few experiments, it did not seem that enough information was easily available to make such a system work (Gastil 1990b: 29).

Regardless of the relative merits of subjective measures in general, and without necessarily accepting or dismissing the criticisms of Gastil's index in particular, one should in theory be able to detect the existence of undue conceptual bias and methodological inadequacies by comparing and verifying Gastil's findings with those of other researchers. It has already been shown that his index is highly correlated with Gurr's and Vanhanen's measures (footnotes 2 and 3). Furthermore, Lane and Ersson compare Gastil's PRI and Humana's index and find correlation coefficients of .90 (N=102) for 1983 and .91 (N=88) for 1986 (Lane and Ersson 1990: 67). Correlation coefficients of .94 (N=129) are also found with Coppedge and Reinecke's Polyarchy Scale for 1985, and .94 (N=97) with

Hadenius' index for 1988 (Lane and Ersson 1994: 101). Quite clearly, Gastil's findings have not been off the mark.[4]

Vanhanen's Index of Democratization is, on the other hand, based entirely on quantitative indicators. He justifies the selection of his two key variables, competition and participation, as follows:

> The existence of legal competition indicates that people and their groups are free to organize themselves and to oppose government. It also indicates the existence of some equality in the sense that different groups are equally free to compete for power. The degree of participation in crucial decision-making through elections or by some other means indicates the extent of "the people" taking part in politics. It seems plausible to regard a political system the more democratizedthe higher the degrees of competition and participation there are (Vanhanen 1990: 17).

For his competition variable, Vanhanen takes into account the share of smaller parties' votes in contested elections by subtracting the percentage share of votes won by the largest party from 100. The participation variable refers to the degree of electoral participation as a percentage of the total population.

The arguments against using the competition variable are three-fold. First, it may be claimed that: "there is an inherent ethnocentrism, in that the multiparty system that characterizes most Western nations is de facto the most democratic" (Bollen 1986: 570). However, no one has as yet devised an alternative measure of democracy which is not 'ethnocentric' in this sense. Second, some have argued that the emphasis on smaller parties' votes unduly favours those democracies having a system of proportional representation at the expense of those systems with two-party rule (Bollen 1986: 572; Bollen 1990: 15; Moore 1995: 9). Hence, according to Vanhanen's scoring, Iceland (ID value of 35) is almost twice as democratic as the United States (ID of 18.7). Third, the competition variable does not take into account the fact that an electoral landslide in favour of one party may simply reflect people's overwhelming preference for that party (Bollen 1990: 572; Moore 1995: 9).

Criticisms of Vanhanen's participation variable are similar to those levied against all measures of electoral participation; namely, that all such measures are generally unreliable (Bollen 1986: 571; Bollen 1990: 14). Moore (1995: 9) summarizes the two principal arguments:

> ...high electoral turnouts may reflect no more than the power of the political elite to ensure the semblance of democracy in circumstances where there is no real electoral contest; and that, in genuine democratic systems, low turnouts may simply reflect that voters are satisfied with their political leadership and government.

[4]Among the many empirical studies that have employed Gastil's measure are the World Development Report (1991), Dasgupta and Weale (1992) and Lane and Ersson (1993). The 1991 Human Development Report acknowledgedit as a 'major index' (UNDP 1991: 98).

To overcome this conceptual hurdle, one is advised to "use levels of electoral turnout as one of several components of a democracy score" (Moore 1995: 9).

Vanhanen's Index of Democratization is highly correlated with Gastil's PRI (as previously shown) and with other measures of democracy. Using c1960 as the point of comparison, Lane and Ersson (1990: 67) find correlations of .79 with Jackson's index, .80 with Bollen's Index (1960) and .76 with Bollen's index (1965). Vanhanen himself (1990: 25) finds a correlation of -.820 with Coppedge and Reinecke's Polyarchy Scale for 1985. These correlations show that Vanhanen's scoring values are generally consistent with those of other researchers.

The Level of Democracy Index (LoD)

My chosen measure of democracy, the Level of Democracy index (LoD), is a combination of Gastil's Political Rights Index (PRI) and Vanhanen's Index of Democratization, *scaled* (ID(S)), and is represented by the formula:

$$\mathbf{LoD = (PRI + ID(S)) / 2}$$

A country's LoD value equals the sum of its PRI value plus its ID(S) value divided by two (PRI values and ID(S) values are weighted equally). Like the PRI and ID(S), the LoD employs a seven point scale (with 1.0 the highest or most democratic value, and 7.0 the least democratic value). Technical Note 1 describes the construction of the LoD in detail (including the method for converting Vanhanen's raw ID values into scaled ID values). The complete list of LoD values for all countries is presented in Appendix B.

There are several reasons for combining the PRI and ID into one index, the LoD. First, and most importantly, the LoD provides a more complete picture of the level of democracy in a country than could either of its two constituent indices alone, as may be seen in light of the preceding criticisms of each index and as a result of the evidence to follow. Since the PRI and ID measure different dimensions, there is no danger of overlapping on the methodological terrain. The PRI reflects the political liberties available in a country, while the ID provides a good indication of how democratic the political system is in practice. The LoD therefore effectively captures what Diamond (1992: 455) has called the 'principal dimensions of democracy': competition, participation and liberty; components which correspond to Dahl's notion of 'polyarchy' (Sorensen 1993a: 15).

Second, each constituent index represents a different operational approach - one evaluative (PRI), one quantitative (ID(S)) - which, when combined into the LoD, gives the researcher the best of both worlds. Whereas subjective evaluations may overcome the fact that statistics sometimes 'lie', quantitative measures may counter any shortcomings or bias

in subjective assessments. Consider the case of Botswana. Gastil has consistently classified the country as a stable democracy, with a PRI score of 2.0 (like Finland, for example) for virtually every year from 1974 onwards. While Vanhanen (1984: 111) recognizes that "Botswana is the only African country in which a competitive party system has survived the years of independence", he observes that "it is significant that the largest party's share of the votes has remained high (from 68 to 81%) and the degree of electoral participation is low (from 10 to 24%)". He is thus inclined to consider Botswana as a democracy "only with some qualifications", since it is "doubtful whether democracy in Botswana could survive a serious challenge to the (dominant party's) rule" (Vanhanen 1990: 152). His (unscaled) ID values for Botswana - 4.8 (1960/9), 3.1 (1970/9), 5.7 (1980/8) - are actually comparable to those found for non-democratic states such as Nicaragua (4.4 for 1960/9; 2.6 for 1970/9) and Panama (6.6 for 1980/8).

The discrepancies between the assessments of Gastil and Vanhanen are revealed in Table 3.2, where the PRI and ID(S) values for Botswana during three periods are compared (the corresponding LoD values are presented on the far right). Taking into account the magnitudes of both indices, the LoD values would classify Botswana as being semi-democratic during the 1970-80 period, largely democratic during the 1980-90 period, and somewhat democratic over the entire 1970-90 period.

Table 3.2 Botswana's Democratic Credentials

	Indices of Democracy		
Period	PRI	ID(S)	*LoD*
1970/80	2.1	5.0	*3.6*
1980/90	1.8	3.0	*2.4*
1970/90	1.9	4.0	*3.0*

All indices are scaled from 1.0 (most democratic) to 7.0

The case of Botswana helps to illustrate another advantage of employing the LoD index: by combining the PRI and the ID(S), the likelihood is reduced that any classification scheme will stray too far off the mark. According to its PRI value (2.1), Botswana was democratic during the 1970-80 period, whereas its ID(S) value (5.0) indicates that this was far from true. Botswana's LoD value (3.6) essentially shows that the country was neither strongly democratic nor strongly authoritarian (in other words, 'semi-democratic'). Consider the additional examples in Table 3.3 of countries in my sample with discrepancies of +/-2.0 in their respective average PRI and ID(S) values (with corresponding LoD values) for the period 1970-80.

Table 3.3 Comparing PRI, ID(S) and LoD Values for Selected Countries, 1970-80

Country	Indices of Democracy PRI	ID(S)	*LoD*
Brazil	4.3	7.0	5.7
Burkina Faso	4.0	7.0	5.5
Greece	4.2	2.0	3.1
South Korea	4.8	7.0	5.9
Kuwait	5.0	7.0	6.0
Morocco	4.4	7.0	5.7
Paraguay	4.9	2.0	3.5
Philippines	4.9	7.0	6.0

In 6 of the 8 cases, Gastil's PRI provides a more favourable view of a country's degree of democratization than does Vanhanen's ID(S), although these countries were by no means democratic. Significantly, two countries (Greece and Paraguay) are judged by their ID(S) values to have been (on average) democratic during the period, but non-democratic by their PRI values.

By combining point (PRI) and period (ID(S)) measures one may better assess the true *political environment* responsible for a country's human development status. As countries may fluctuate between democratic and non-democratic forms of government with some regularity, given the inherent instability of many political regimes in the developing world, it would be unwise to focus exclusively on a country's level of democracy at one particular point in time (Sloan and Tedin 1987: 99; Muller 1988: 50; Dasgupta and Weale 1992: 124). Otherwise, it is possible to fall into the trap of allocating credit or blame for a country's human development situation on the 'wrong' political system. To cite an obvious example: the period of communist rule in the former USSR and its former satellites in Eastern Europe must be held as the true political environment in which to examine these countries' respective levels of human development circa 1990, despite the more democratic scores they acquired in the immediate aftermath of the 1989-90 upheavals.

Consider the similar cases of Burkina Faso and Ghana, two African countries whose annual PRI values hovered primarily between 6.0 and 7.0 (the most authoritarian range) for the period 1972-83, except for the briefest of democratic interludes (Burkina Faso in 1978-9, Ghana in 1981-2) for which they were accorded democratic PRI values of 2.0. Someone investigating the political factors behind the low human development status of both countries around 1980 might, inadvertently or not, select these democratic PRI values (c1980 after all) as proof that 'democracy is holding back Africa's development' when the reality was much different: taking into account the period (1970-79) leading up to this date, each country receives the most authoritarian ID(S) value (7.0).

The LoD measure reflects, and gives equal weight to, both the *immediate* (PRI) and *preceding* (ID(S)) political environments for a given reference date (Technical Note 1). Thus, in the above examples, the LoD values for Burkina Faso and Ghana would be calculated as follows:

LoD(1980)= (PRI 1979/81 avg. + ID(S) 1970/9) / 2

Burkina Faso	Ghana
LoD(1980)= (3.0 + 7.0) / 2= 5.0	LoD(1980)= (2.7 + 7.0) / 2= 4.9

One would therefore conclude that, despite the brief periods of democratic rule, the human development profiles of both countries circa 1980 would have to be analyzed *primarily* against their respective authoritarian political environments.

The need to take both immediate and preceding averages into consideration is further highlighted in Table 3.4, where PRI, ID(S) and LoD values are compared for those countries in my sample (N=123) with very large discrepancies (+/- 3.0) between their point and period values around 1970. The most striking example of all is Lesotho: accorded the highest possible democratic value (1.0) in one index (ID(S)) but the lowest possible democratic value (7.0) in the other (PRI). Six countries - Argentina, Greece, South Korea, Lesotho, Panama and Somalia - changed from democratic period (ID(S)) values to authoritarian point (PRI) values, whereas El Salvador's authoritarian period (ID(S)) value was followed by a democratic point (PRI) value. These examples demonstrate how one's analysis may be severely affected by the choice of either point or period measures. The LoD values, however, capture both dimensions, allowing possible fluctuations in the levels of democracy in the context of a broader measure of the political environment.

Table 3.4 Discrepancies Between Point and Period Values for Selected Countries, c1970

Country	ID(S) 1960/9	PRI 1972	LoD c1970
Afghanistan	7.0	4.0	5.5
Argentina	2.0	6.0	4.0
Cameroon	3.0	6.0	4.5
El Salvador	6.0	2.0	4.0
Greece	2.0	6.0	4.0
South Korea	2.0	5.0	3.5
Kuwait	7.0	4.0	5.5
Lesotho	1.0	7.0	4.0
Pakistan	7.0	3.0	5.0
Panama	2.0	7.0	4.5
Peru	3.0	7.0	5.0
Somalia	2.0	7.0	4.5

In short, there are four principal reasons why the Level of Democracy index has been selected for the purposes of this research: (1) it is a fairly complete measure of democracy, capturing the key dimensions of this concept; (2) it embodies both qualitative and quantitative constituent indicators; (3) it minimizes the likelihood that obvious errors of classification will occur; and (4) it reflects the broad political environment by taking into account both point and period values.

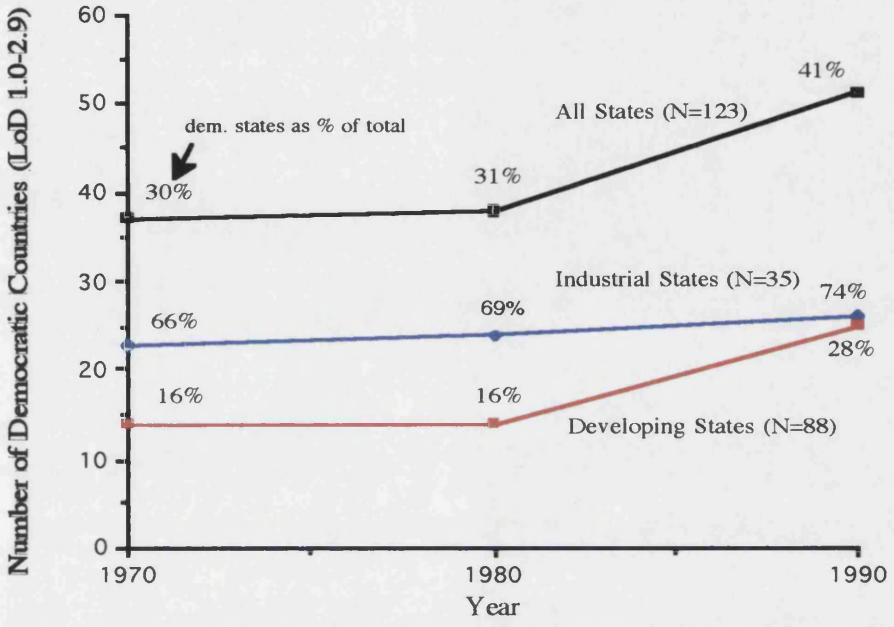
An Overview of Levels of Democracy, 1970-90

The number of democracies - those countries with LoD values between 1.0 and 2.9 - increased noticeably during the course of the 1970-90 period, from 37 countries (or 30% of the total sample) in 1970 to 51 countries (41%) in 1990 (Figure 3.1). While there was little aggregate change between 1970 and 1980, the number of democratic states increased sharply between 1980 and 1990, from 38 to 51 (or from 31% to 41% of the total sample). Given that the number of democracies in the sample of industrial states (N=35) consistently remained high (23 in 1970, 24 in 1980 and 26 in 1990), the real movement occurred in the developing world (N=88): the number of democracies rose from 14 (1970 and 1980) to 25 (1990).[5] In percentage terms, however, the figures remained largely unimpressive: just over one-quarter (28%) of all developing states in 1990 were democratic, up from a paltry 16% in both 1970 and 1980. By contrast, between two-thirds (1970) and three quarters (1990) of all industrial states had democratic forms of government; the principal exceptions being the former Soviet bloc states,[6] and the three former dictatorships (Greece, Spain and Portugal) which subsequently reverted to democratic rule.

[5]The 'industrial' / 'developing' distinctions are borrowed directly from the UNDP's statistical tables (1994 Human Development Report). The only change is my decision to include Cyprus in the industrial sample.

[6]Although the former Soviet bloc states technically began their democratic transitions in 1989-91, their LoD values circa 1990, which take into account both the preceding decade and the more immediate years, reflect the fact that their political environments leading up to and including the end of the 1980s were far from democratic. Judging by their slightly less authoritarian LoD values, the two countries which had by this date made the most progress towards any semblance of democratic rule were Hungary and Poland (both 5.3); the remaining states still displayed LoD values between 6.0-7.0.

Fig. 3.1 Changes In Levels of Democracy, 1970-90

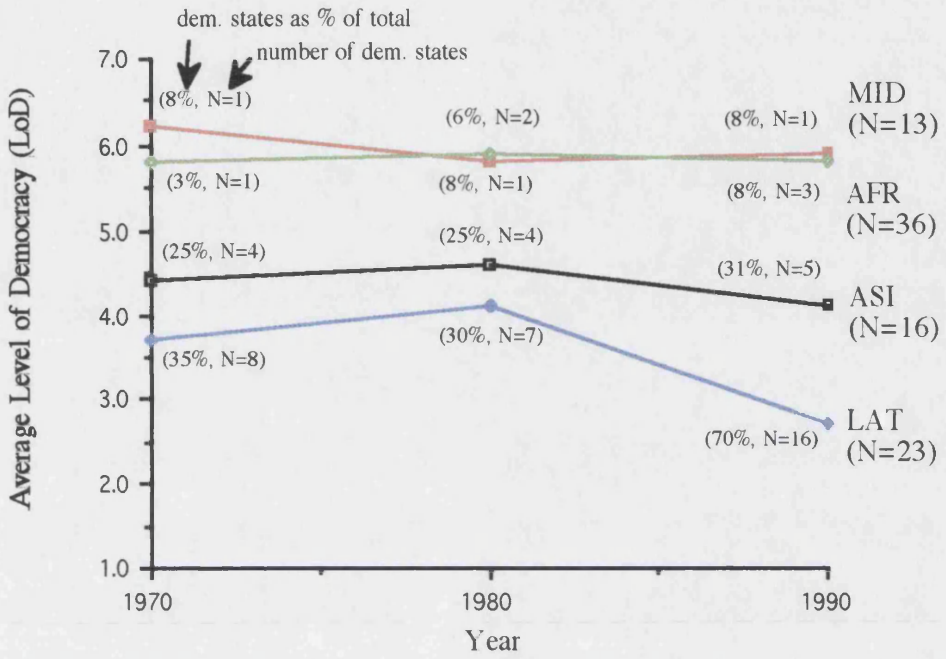


Another means of analyzing democratic trends involves computing average levels of democracy (Figure 3.2). Of the four developing regions considered in this study,[7] Latin America (LAT, comprising Central and South America) remained the most democratic (or, alternatively, the least authoritarian) throughout the period, with average LoD values of 3.7 in 1970, 4.1 in 1980, and 2.7 in 1990. Whereas only 8 of the 23 LAT states (or 35%) displayed democratic LoD values in 1980, this number had increased to 16 states (70%) by 1990.[8] It is worth noting that this increase (8) accounts for almost the entire number of new democracies (11) in the sample of developing states (Figure 3.1 above); in other words, the modest democratization trend that appeared to affect the developing world in general (from 16% to 28% of the total) could more accurately be attributed to changes in the LAT region. Moreover, irrespective of date, the majority of developing democracies were found in Latin America: 57% in 1970; 50% in 1980; and 64% in 1990.

[7]The detailed breakdown of developing countries by regional group and LoD values per period is given in Chapter 4.

[8]The eight democratic LAT states circa 1970 were: Jamaica, Barbados, Venezuela, Chile, Trinidad and Tobago, Costa Rica, Uruguay and Colombia. Chile and Uruguay had fallen from this list by 1980, but the Dominican Republic had joined it. All LAT states had democratic LoD values for c1990 except for Nicaragua, Guatemala, Panama, Paraguay, Chile, Haiti and Cuba.

Fig. 3.2 Average Levels of Democracy By Developing Region, 1970-90



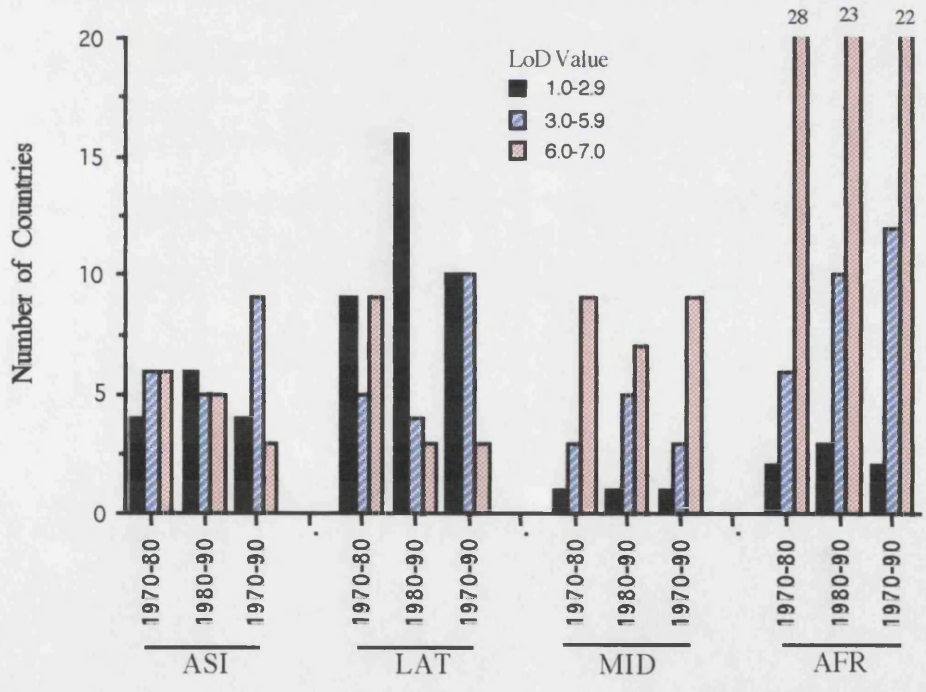
The next most democratic / least authoritarian region was Asia (ASI), with average LoD values of 4.4 in 1970, 4.6 in 1980, and 4.1 in 1990. The number of democratic states hovered between 4 and 5, or between one-quarter and just under one-third of the regional sample. Only Sri Lanka and India managed to maintain democratic LoD values for all three dates, while Malaysia (1970 and 1980) and Papua New Guinea (1980 and 1990) had democratic values for two dates (Japan is not included here as it is classified as an industrial country). Five countries had democratic LoD values circa 1990: India, Sri Lanka, South Korea, Papua New Guinea, and the Philippines.

The two remaining regions, the Middle East and North Africa (MID) and sub-Saharan Africa (AFR), were staunchly authoritarian overall. Very little separated their respective regional LoD averages: 6.2 (MID) and 5.8 (AFR) in 1970, 5.8 and 5.9 in 1980, 5.9 and 5.8 in 1990. The only MID state to (barely) qualify as a democracy was Turkey (for all three dates).[9] The only AFR state to qualify for all three dates was Gambia, which was joined by Mauritius in 1980 and 1990 (it technically fell just outside the 1.0-2.9 range in 1970, with a value of 3.0), and by Botswana in 1990 (it fell just shy of the democratic threshold in 1970 and 1980, with values of 3.0 and 3.5). Although democratic experiments did eventually emerge in the AFR region in the post-1990 period, they failed to take root in the MID region to any significant extent.

[9]Israel is not classified with this regional group since it is considered to be an industrial country.

These general observations may be complemented further by looking at the actual distribution of countries by level of democracy. Figure 3.3 presents the results across the four developing regions, focusing specifically on average LoD values over three different periods. With the exception of the LAT region, which witnessed a staggering jump in the number of democratic states (from 9 to 16) from the first shorter period (1970-80) to the second (1980-90), the number of democratic states increased only fractionally in both the ASI and AFR regions (among MID states, only Turkey displayed democratic LoD values in both periods). As suggested by their average regional LoD values, most non-democratic MID and AFR states tended to be strongly authoritarian (6.0-7.0), whereas non-democratic ASI states were fairly evenly divided between those with values in the 3.0-5.9 and 6.0-7.0 ranges; over the entire 1970-90 period, however, 9 of the 12 non-democratic ASI states had period LoD values of 3.0-5.9 (the three exceptions were China, Afghanistan and Myanmar).

Fig. 3.3 Distribution of Countries By Level of Democracy (Period Values) and Developing Region, 1970-90



Just under one in five developing states (17 or 19%) managed to produce a democratic LoD average over the entire 1970-90 period (the complete country list by region is presented in Table 3.5); the corresponding numbers for the shorter terms were 16 or 18% (1970-80) and 26 or 30% (1980-90). Of the 17 states with LoD values between 1.0-2.9, four came from the ASI region, ten came from the LAT region, one came from the MID region, and two came from the AFR region.

Table 3.5 Levels of Democracy Across Developing Regions, 1970-90 Averages

ASI Country	LoD	LAT Country	LoD	MID Country	LoD	AFR Country	LoD
India	1.5	Barbados	1.0	Turkey	2.4	Mauritius	2.2
Sri Lanka	1.8	Costa Rica	1.0	U.A.E	5.4	Gambia	2.5
Papua New G.	2.1	Venezuela	1.1	Morocco	5.6	Botswana	3.0
Malaysia	2.6	Trinidad & T.	1.8	Iran	5.7	Madagascar	4.6
Hong Kong	4.0	Jamaica	1.9	Egypt	6.0	Uganda	4.9
Korea, S.	4.1	Domin. Rep.	2.0	Kuwait	6.1	Zimbabwe	4.9
Philippines	4.1	Colombia	2.1	Tunisia	6.3	Nigeria	5.0
Thailand	4.4	El Salvador	2.6	Jordan	6.3	Zambia	5.1
Singapore	4.5	Peru	2.8	Syria	6.4	Senegal	5.1
Bangladesh	4.5	Honduras	2.9	Algeria	6.5	South Africa	5.3
Pakistan	4.9	Uruguay	3.0	Saudi Arabia	6.6	Sierra Leone	5.6
Indonesia	5.5	Argentina	3.2	Libya	6.7	Sudan	5.7
Nepal	5.6	Ecuador	3.3	Iraq	6.9	Liberia	5.9
China	6.7	Mexico	3.3			Gabon	5.9
Afghanistan	6.9	Bolivia	3.4			Tanzania	6.0
Myanmar	7.0	Guatemala	3.4			Lesotho	6.2
		Paraguay	4.0			Kenya	6.2
		Nicaragua	4.0			Burkina Faso	6.2
		Brazil	4.2			Ivory Coast	6.4
		Panama	5.3			Mozambique	6.5
		Chile	6.3			Ghana	6.5
		Haiti	6.7			Cameroon	6.5
		Cuba	6.8			Rwanda	6.7
						Malawi	6.7
						Zaire	6.8
						Congo	6.8
						Chad	6.8
						Togo	6.8
						Angola	6.8
						Cen.Afr.Rep	6.9
						Niger	6.9
						Mali	6.9
						Burundi	6.9
						Benin	7.0
						Guinea	7.0
						Somalia	7.0

3.2 Measuring Human Development: The Integrated Human Development Index (I-HDI) and its Constituent Indices

Conceptions of Human Development

Despite the very general consensus among academics and policy-planners which has recently emerged over how to define human development, sufficiently representative indices have not been forwarded. The problem here is that, as the UNDP acknowledges, "the concept of human development is much broader than its measurement" (UNDP 1991: 15).

Most interpretations stress the morality and universality of the concept of human development, while broadly defining its focus as the realization of the human potential. The UNDP's own definition is perhaps the best known:

> Human development is a process of enlarging people's choices. The most critical of these wide-ranging choices are to live a long and healthy life, to be educated and to have access to resources needed for a decent standard of living. Additional choices include political freedom, guaranteed human rights and personal self-respect....(UNDP 1990: 1)

A decade earlier, Streeten (1981a: 335) had written that: "a basic needs approach to development starts with the objective of providing the opportunities for the full physical, mental and social development of the human personality...".

Early writers on basic needs made a necessary conceptual distinction between 'material needs' (the survival needs of food, water, sanitation, shelter, etc) and 'non-material needs' (human rights, security, equality, participation). They warned, however, against focusing on one set of needs at the expense of the other (Ghai and Alfthan 1977; Streeten 1981a; Hopkins and Van Der Hoeven 1983). Indeed, it was commonly argued that:

> (The) separability between material and non-material needs..is false. The satisfaction of material basic needs is not an end in itself and, therefore, not separable from <u>how</u> these needs are satisfied. It would thus be wrong to pose the problem as though it were one of providing people with a list of material goods, with 'non-material' goods as an optional extra (Lee 1977: 61).

Yet despite this insistence on the inseparability of the two sets of needs, when it came to selecting indicators of basic needs, the non-material needs were neglected altogether.[10] This neglect may be traced to two factors: (1) the lack of appropriate measures of non-material needs; and (2) the central preoccupation of researchers with

[10] Drewnowski's Level of Living Index (1970) consists of 5 indicators: nutrition, medical care, literacy, primacy school enrollment, and housing. Hicks and Streeten (1981) select the following eight indicators of basic needs: life expectancy, infant mortality, nutrition, water, sanitation, literacy, primary school enrollment, and housing.

indicators of material needs as new measures of individual welfare (replacing the more traditionally-accepted GNP measure). Even Morris' PQLI, the most widely used composite index of basic needs of its time, is (as its name implies) a *Physical* Quality of Life Index, capturing, by its author's own admission, "some (but certainly not all) desired qualities of life" (Morris 1979: 94).

Like the PQLI, the Human Development Index (HDI) is also a measure of basic needs / capabilities. Indeed, the authors of the first Human Development Report confessed that the HDI:

> ...is an approximation for capturing the many dimensions of human choice...(It) captures a few of people's choices and leaves out many that people may value highly-economic, social and political freedom, and protection against violence, insecurity and discrimination, to name but a few. The HDI thus has its limitations (UNDP 1990: 1, 16).

While subsequent reports have sought address some of the other 'highly valued choices' (or non-material needs) - Human Freedom (Human Development Report 1991, 1992), Political Participation (Human Development Report 1993), Human Security (Human Development Report 1994), Social and Gender Equity (Human Development Report 1995) - these other dimensions have not been systematically incorporated into a measure which more accurately reflects the UNDP's own broader conceptualizations. For example, despite professing the desire to do so in the 1991 Human Development Report, the UNDP never merged the HDI and its own Human Freedom Index into a broader composite index (UNDP 1991: 21).[11] Partly because of such limitations, some claim that "caution is needed in interpreting a country's HDI value as a measure of achieved well-being for all its people" (Griffin and McKinley 1993: 77).

As the UNDP recognizes, there is a gulf between the concept of human development and its measurement which no existing index - the HDI included - seems able to bridge. For this reason, a new index of human development has been constructed for this study.

In its broadest and most complete context, human development must embody what has been called the "total life situation" (Baster 1972: 7). This involves taking both material and non-material needs into account. To begin with, human development must reflect the 'capabilities approach' favoured by the UNDP and others (Desai 1989, Sen 1990), which maintains that individuals must be empowered to enable them to exercise greater life opportunities. The HDI's constituent variables reflect the UNDP's belief that individual empowerment involves providing for the "three essential elements of human life - longevity,

[11]The main reason given by the UNDP is "lack of data". Perhaps the UNDP would have selected Gastil's civil rights measure, for which data is certainly available, had it been assured that no political opposition would be forthcoming from members of the UN who might object to the index's supposedly 'Western' bias.

knowledge and decent living standards" (UNDP 1990: 12). In turn, it is "the basic objective of development (to) create *an enabling environment* for people to enjoy long, healthy and creative lives" (UNDP 1990: 9, emphasis added).

This reference to 'an enabling environment', which must incorporate some of the aforementioned non-material needs, highlights an important fact: the human condition cannot truly be understood without reference to the prevailing conditions of society. Desai (1989: 8) notes that while: "...the resources available to the individual depend on skills and disabilities as well as endowments..., (the) environment will influence available resources". Crucially, therefore, we must "seek to overcome the polarity that treats 'individual development' as distinct from 'social development'...(for) neither can live in isolation" (Miles 1985: 10).

In order to fulfill its conceptual potential, human development must be defined in terms of both individual *and* social development. More accurately, it should reflect the level of individual capabilities and the nature of the social environment in which these capabilities are exercised. A proper measure of human development, then, must incorporate both dimensions.

Measuring Individual Capabilities and the Social Environment: The Human Development Index (HDI) and the Index of Social Conditions (ISC)

Despite some of the criticism levied against the UNDP's Human Development Index (HDI),[12] it is still the best and most widely-accepted index of its kind. For this reason, it is selected as my measure of individual capabilities.

Though modified in several technical respects since the first Human Development Report appeared in 1990, the HDI has focused on the same three areas of *individual empowerment:* longevity (life expectancy), knowledge (mean years of schooling and adult literacy rate), and basic living standards (PPP$).[13] The HDI has been constructed as follows (details are found in Technical Note 2):

$$\mathbf{HDI = (I(LE) + I(ED) + I(AI)) / 3}$$

where: I(LE) is Indexed Life Expectancy
I(ED) is Indexed Educational Attainment
I(AI) is Indexed Adjusted Income

[12]Most criticisms directed against the HDI focus on the technical aspects behind its construction or the selection of indicators (McGillivray 1991; Hopkins 1991; McGillivray and White 1993; Ogwang 1994; Doessel and Gounder 1994). Others acknowledge the HDI's importance as a 'first step' towards the construction of an acceptable human development measure, but lament its failure to encompass the broader range of human development dimensions (Rao 1991; Desai 1991; Monshipouri 1995).

[13]The version of the HDI employed in this study comes from the 1994 Human Development Report (see Technical Note 1 in UNDP 1994: 108). This version was selected for methodological consistency: my time-series data comes principally from Annex Table A5.3 in the same Report.

The 1994 Report provides the time-series HDI values for this study, with some notable exceptions: data for several countries, including the former Communist states and Cuba, were unavailable for the period under review and had to be calculated from individual sources. The list of HDI values for all countries in my sample is found in Appendix C.

My measure of the prevailing social environment, the Index of Social Conditions (ISC), has been specifically constructed for this study, as have the ISC's three constituent indices: the Security Index (SEC), the Liberty Index (LIB), and the Mobility Index (MOB). As described in Technical Note 3, the following formula is employed:

$$\mathbf{ISC = (SEC \times .4) + (LIB \times .4) + (MOB \times .2)}$$

Given their greater instrumental value, the Security Index and the Liberty Index have both been accorded twice as much weight (40% each) as the Mobility Index (20%). To correspond with the HDI scale, all indices have been scaled from 1.000 (highest possible value) to 0.000 (lowest possible value). The complete set of ISC values is given in Appendix D. Each constituent index, described in turn below, has been designed to broadly capture one crucial dimension of social conditions.

The 1994 Human Development Report outlined the various components of human security and their importance to human development. The UNDP's own definition is necessarily general and built on a two-fold premise: "Human security means that people can exercise (choices) *safely* and *freely* - and that they can be relatively confident that the opportunities they have today are not totally lost tomorrow" (UNDP 1994: 23; emphasis added). Instead of attempting to devise one fairly unwieldy measure, I have chosen to represent these two distinct aspects in two separate indices: the Security Index measures the 'safety' component and the Liberty Index measures the 'freedom' component.[14]

The Security Index is broadly represented by two dimensions, one economic and one socio-political. Inflation is perhaps the greatest single indicator of economic (in)security.[15] Taken to one extreme, 'zero' inflation (as purportedly witnessed in the

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[14]The UNDP's seven components of human security - economic, food, health, environmental, personal, community, and political (civil) - are largely captured by my Security and Liberty indices. For instance, the Inflation variable is a prime indicator of economic (in)security, the Child Survival rate captures the relative degree of social deprivation associated with food and health (in)security, and the Peace/Conflict and Civil Liberties measures capture the degree of personal, community and political (in)security. A measure of environmental security has not been included since there are no appropriate environmental indicators available in the required formats.

[15]It was my original intention to combine the inflation indicator and an unemployment indicator into a 'misery index'. However, unemployment statistics were largely unavailable for the non-industrialized countries in the required time-series format. Moreover, it soon became apparent that unemployment statistics are generally inconsistent. Sullivan (1991: 111-112) notes that: "Unfortunately, accurate statistics for such a politically sensitive measure are often impossible to obtain...(This is) a measure for which data goes a-begging".

former Communist states) suggests an economic environment characterized by stable and predictable wages and prices, while, on the other hand, 'runaway' inflation almost inevitably indicates economic collapse (e.g. Germany in the 1920s). The second component in the index reflects the degree of socio-political conflict in a society (or between states). After indexing, the inflation (INFL) and conflict (CONF) variables are given equal weight in the Security Index (SEC):

$$\mathbf{SEC = (INFL + CONF) / 2}$$

A country with a high SEC value would therefore be characterized as having both a secure economic environment underpinned by low inflation and a socio-political environment largely free of conflict (see Technical Note 3, part 2 for sources and methodology; the SEC values for all the countries in my sample are given in Appendix E, the INFL values are found in Appendix F, and the CONF values are found in Appendix G).

The concept of freedom is more controversial. Aside from the inherent problems of interpretation, ideological and cultural differences invariably arise during any debate over the priority to be assigned to human rights versus social rights.[16] Receiving considerable attention in the Human Development Reports (especially the 1991, 1992 and 1994 editions), the UNDP adopts a broad definition, arguing that "human freedom must include economic, social and political (civil) rights" (UNDP 1992: 29).

The Liberty Index consists of variables which measure both individual (civil) and social rights. The Civil Liberties indicator (CIVIL) is derived by scaling Gastil's composite measure of civil liberties. Fourteen basic aspects are assessed by Gastil, covering a fairly wide spectrum.[17] UNICEF's scaled Under Five Mortality Rate has been converted into a Child Survival index (SURV), my measure of social deprivation. As an output indicator, it is a good reflection of food availability (caloric intake), access to safe water and sanitation, and access to basic health facilities and treatments. Both components are given equal weight in the Liberty Index (LIB):

$$\mathbf{LIB = (CIVIL + SURV) / 2}$$

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[16]Indicatively, the United Nations' 1993 World Conference on Human Rights in Vienna pitted East against West, Collectivism against Individualism, Social Rights against Individual Human Rights. The Malaysian Prime Minister encapsulated the former position by maintaining that: "when people are dying and starving, they can't exercise human rights anyway, so priorities must be set on which comes first" (*The Independent*, 14 June 1993). The West contested this stance with the familiar argument that certain rights are fundamental and inalienable, and must therefore be secured at all cost. Naturally, a deadlock emerged.

[17]Gastil's index is constructed after consulting a 'checklist of civil liberties' which includes: media freedom, open public discussion, freedom of assembly and demonstration, freedom of political organization, nondiscriminatory rule of law (independent judiciary and safety from intimidation by security forces), freedom from unjustified political terror or imprisonment, existence of free trade unions etc, free businesses, free professional or other private organizations, free religious institutions, personal social rights, socioeconomic rights, freedom from gross socioeconomic inequality, freedom from gross government corruption (Gastil 1990b: 36).

A country with a high LIB value thus exhibits a high level of civil liberties coupled with a high level of child survival (see Technical Note 3, part 3 for sources and methodology; the LIB values for all the countries in my sample are given in Appendix H, the CIVIL values are found in Appendix I, and the SURV values are found in Appendix J).

Social mobility is another vital dimension which is too often neglected. Three general aspects should be captured by a composite measure: (1) the degree of social equality (of opportunity, and access to resources); (2) the degree of social (occupational) stratification; and (3) the opportunity for socio-economic advancement.

The measure of social equality is my Gender Equity Index (GEND), a composite indicator I have constructed using two variables, gross female secondary school enrollment rates and women as a percentage of the labour force. Simply put, if women are not permitted to enjoy the basic opportunities they should rightfully be entitled to, roughly half the population is denied a true sense of justice. The percentage of people not employed in agriculture (%NAgr) is my measure of occupational stratification. An economy based predominantly on agricultural production offers little room for occupational diversification and the opportunities for advancement that more sophisticated manufacturing- and service-based economies allow. The tertiary enrollment rate (TERT) has been selected as my indicator of the opportunities for self-realization / social advancement. Whether valued for its own sake (the need/desire to learn) or for its instrumental value (as a qualification entitling one to better job prospects), this variable highlights the vast discrepancy in socio-economic opportunities between developed and developing states. These three dimensions are embodied, in equal measure, in the Mobility Index (MOB):

$$\mathbf{MOB = (GEND + \%NAgr + TERT) / 3}$$

A high MOB value thus indicates that a country offers ample opportunities for social mobility / advancement, as represented by a high degree of gender equity, a high percentage of people not employed in the agricultural sector, and a high level of tertiary enrolment (see Technical Note 3, part 4 for sources and methodology; the MOB values for all the countries in my sample are given in Appendix K, the GEND values are found in Appendix L, the %NAgr values are found in Appendix M, and the TERT values are found in Appendix N).

Measuring Human Development: The Integrated Human Development Index (I-HDI)

To more fully capture the essence of the concept of human development, the HDI and ISC have been combined into a composite measure, hereinafter referred to as the Integrated Human Development Index (I-HDI). With the sub-indices weighted equally, the I-HDI is represented by the formula:

$$\textbf{I-HDI} = (\textbf{HDI} + \textbf{ISC}) / 2$$

where:

HDI	•longevity:	life expectancy	I(LE)
	•living standard:	purchasing power	I(AI)
	•knowledge:	mean years of schooling/literacy rates	I(ED)
+			
ISC	•liberty (LIB):	civil liberties + degree of social deprivation	CIVIL SURV
	•security (SEC):	economic (in)security + socio-political (in)security	INFL CONF
	•mobility (MOB):	social/gender equity + absence of occup.stratif. + soc. opport/advancement	GEND %NAgr TERT

A country with a high I-HDI value scores well in terms of both individual capabilities (longevity, living standard, knowledge) and social conditions (liberty, security, social mobility). Like the HDI and the ISC, the I-HDI employs a scale ranging from 1.000 (highest possible value) to 0.000. The complete list of I-HDI values may be found in Appendix O.

The I-HDI therefore embraces the dimensions of human development - 'material' and 'non-material' - described by the UNDP and prominent researchers in the field.[18] This index also recognizes the inseparability of individual empowerment from the broader social context, and vice versa. A narrow focus on the former, as the PQLI and HDI provide,

[18]Six classifications of material and non-material needs may be cited here. Streeten (1981a) lists (1) basic needs, (2) self-determination, (3) self-reliance, (4) security, (5) participation, (6) national /cultural identity, and (7) sense of purpose in life and work. Galtung (1994) considers (1) security, (2) welfare, (3) freedom, and (4) identity. Doyal and Gough (1984) focus on (1) survival/health, (2) autonomy/learning, (3) production (material), (4) culture/communication, and (5) political authority. Weigel (1986) cites (1) existence (basic needs), (2) intelligence (communication, education, information), and (3) sociality (freedom of expression, freedom of association). Desai (1990) looks at (1) capability to stay alive, capability for healthy living, capability to ensure biological reproduction, (2) capability for social interaction, and (3) capability to have knowledge and freedom of expression and thought. The UNDP has considered, in various Human Development Reports (HDRs), (1) individual capabilities (all HDRs), (2) freedom (HDR 1991, 1992), (3) security (HDR 1994), and (4) social/gender equity (HDR 1995).

excludes the latter. Why should, for instance, the issue of civil (or human) rights, or for that matter security or social mobility, necessarily be separated from a consideration of basic health or educational levels, when these components, taken together, are part of one's overall sense of well-being? Furthermore, on a purely theoretical level, it is interesting to observe that the I-HDI covers quite comprehensively the human development dimensions envisioned by Maslow.[19]

Since the I-HDI provides a fairly good approximation of the "total life situation" in a given country, it may be confidently stated that a country is more *developed* than another if it displays a higher I-HDI value. The same claim may not be reasonably made on the basis of the HDI or any other existing index.[20] Indeed, to focus on a country's HDI value alone, without reference to the social environment, is to neglect an integral part of the human development equation.

Countries with very similar HDI values may have completely different social environments (ISC values), which may be either more or less conducive to the promotion of individual capabilities. Consider the three sets of countries presented in Table 3.6.

Table 3.6 How HDI Values Alone Can Be Misleading: Comparing Human Development Profiles (c1980)

Country	HDI	*LIB*	*SEC*	*MOB*	ISC	I-HDI
USSR	0.841	*0.488*	*0.497*	*0.664*	0.527	0.684
Greece	0.839	*0.894*	*0.855*	*0.513*	0.802	0.821
Argentina	0.790	*0.620*	*0.265*	*0.574*	0.469	0.629
Costa Rica	0.746	*0.975*	*0.847*	*0.487*	0.826	0.786
Uganda	0.215	*0.456*	*0.000*	*0.144*	0.211	0.213
Nepal	0.209	*0.528*	*0.920*	*0.120*	0.603	0.406

[19]For example, Maslow's 'Physiological Needs' dimension is represented, directly or indirectly, by all three of the HDI's constituent indices (I(LE), I(AI), I(ED)), the LIB index's two constituent parts (CIVIL, SURV), and the CONF variable in the SEC index. His second dimension, 'Safety Needs', is represented by two constituent parts of the HDI (I(LE) and I(AI)), the SURV variable, and both parts of the SEC index (CONF and INFL). The third dimension, 'Social/Belonging Needs', is covered by the CONF and GEND variables. The fourth dimension, 'Equality/Esteem Needs', is represented by the I(ED) and CIVIL variables, and all three components of the MOB index (GEND, %NAgr, TERT). The fifth dimension, 'Self-Realization/Actualization Needs', is represented by the I(ED), GEND and TERT variables. Undoubtedly, other configurations may exist and others may choose to interpret the variables differently.

[20]Regarding his own index, Morris readily admits that: "the PQLI does not measure total welfare. Just as it cannot be said that a country with a higher GNP is 'better off' than a country with a lower GNP...so, too, it cannot be said that a country with a higher PQLI is 'better off' than one with a lower PQLI - except in terms of what it measures, that is, some (but certainly not all) desired qualities of life" (Morris 1979: 94). Other indices have employed many diverse indicators in the hope of presenting a more balanced overall picture of development (see Estes 1988; and Slottje et al 1991). However, quantity does not necessarily imply quality, as the methodological shortcomings of such blanket approaches are further undermined by the absence of any coherent conceptual reference to human development. For this reason, using some highly dubious indicators (among them 'national territory per square km of road', 'radio receivers per 1000', 'number of daily newspapers in each country'), Slottje et al's (1991) country rankings reveal some absurd conclusions: Jamaica (4th), New Guinea (5th) and Gambia (16th) are more 'developed' than 10 states of the European Union (France, for instance, is ranked 43rd).

In each comparison group, two countries with similar HDI values (c1980) were found to exhibit altogether different ISC values and, consequently, different I-HDI values. The size of the gulf between their respective ISC values was, in turn, dependent upon on the degree of divergence among the ISC's constituent indicators (notice the difference in SEC values between war-torn Uganda and peaceful Nepal). Hence, the similar HDI values present a somewhat misleading picture for each set of countries, as the discrepancies in social conditions demonstrate (because of its noticeably better LIB and SEC values, Greece had a substantially higher ISC rate than the USSR, which was translated into a much higher I-HDI value). On the basis of their I-HDI values, it is claimed that, at that particular point in time, Greece (0.821) was more developed than the USSR (0.684), Costa Rica (0.786) was more developed than Argentina (0.629), and Nepal (0.406) was more developed than Uganda (0.213).

Just as the ISC should not be neglected in favour of the HDI alone, the reverse is also true. Quite often, similar social conditions may, on the surface, conceal vast differences between countries in terms of levels of individual empowerment. Clearly, there are significant differences in HDI values within the comparison groups in Table 3.7 below, despite the almost identical ISC values displayed by the two countries in each set (the contrast between Israel and Benin is particularly striking). Encompassing these differences, the I-HDI provides a better indication of the true gulf between the states in terms of human development at that point in time (c1970): Hungary (0.705) was much more developed than Papua New Guinea (0.516); Israel (0.720) was much more developed than Benin (0.383); and Uruguay (0.674) was much more developed than Egypt (0.424).

Table 3.7 How ISC Values Alone Can Be Misleading: Comparing Human Development Profiles (c1970)

Country	ISC	HDI	I-HDI
Papua NG	0.707	0.325	0.516
Hungary	0.706	0.705	0.705
Israel	0.614	0.826	0.720
Benin	0.611	0.162	0.383
Uruguay	0.585	0.762	0.674
Egypt	0.579	0.269	0.424

Since the HDI and ISC are attributed equal weight, it is possible for countries to arrive at the same human development plateau in distinctly different ways. In other words, two states may exhibit very similar I-HDI values, but rather different HDI and ISC values.

Table 3.8 provides the detailed human development profiles for two Latin American countries, Honduras and Brazil, for 1970.

Table 3.8 Comparing the Human Development Profiles of Honduras and Brazil, c1970

Country	HDI	*LIB*[1]	*SEC*[2]	*MOB*[3]	ISC	I-HDI
Brazil	0.507	*0.535*	*0.539*	*0.305*	0.490	**0.499**
Honduras	0.350	*0.648*	*0.835*	*0.178*	0.629	**0.489**

where:	*1. LIB*		*2. SEC*		*3. MOB*		
	CIVIL	SURV	INFL	CONF	GEND	%NAgr	TERT
Brazil	0.333	0.736	0.078	1.000	0.307	0.540	0.068
Honduras	0.667	0.630	0.942	0.728	0.173	0.330	0.031

These two countries provide for interesting contrasts. Though enjoying a higher HDI value (0.507) than Honduras (0.350), Brazil's ISC value (0.490) was noticeably lower than Honduras' (0.629). This is explained by the higher values Honduras exhibited in the Liberty Index and Security Index (0.648 and 0.835, compared to 0.535 and 0.539 for Brazil). Regarding the Liberty Index, Honduras had a much better record on civil liberties than Brazil (the CIVIL values were 0.667 and 0.333, respectively). The discrepancies in SEC values were primarily due to their inflation rates (Honduras' rate was stable, while Brazil experienced runaway inflation). Despite the above differences, when the overall profiles were assessed, the two countries shared almost identical human development (I-HDI) scores.

The Measures In Perspective

Having outlined the various measures, the question naturally arises: to what extent are they related? As Table 3.9 shows, using data for the entire sample (N=123) c1990, there is a very high degree of inter-correlation. Predictably, given its composition, the I-HDI is very strongly correlated with both the HDI (0.957) and the ISC (0.919). The HDI is highly correlated with the ISC (0.765), confirming that there is a strong relationship between levels of individual capabilities and social conditions. Among its constituent indicators, the ISC is most highly correlated with the Liberty Index (0.843) and least correlated - although the correlation is still strong - with the Security Index (0.746). The strongest correlation

Table 3.9 Inter-Correlations Among the Measures c1990 (N=123)

	(1)	(2)	(3)	(4)	(5)	(6)
(1) HDI		.765	.957	.838	.247	.929
(2) ISC	.765		.919	.843	.746	.761
(3) I-HDI	.957	.919		.893	.488	.911
(4) LIB	.838	.843	.893		.298	.814
(5) SEC	.247	.746	.488	.298		.229
(6) MOB	.929	.761	.911	.814	.229	

produced by the ISC's constituent indicators is the one between the Liberty Index and the Mobility Index (0.814). All the correlations in the table are positive and relatively strong except those involving the Security Index (which are generally weak).

Given that they together comprise the I-HDI, the relationship between the HDI and the ISC is of particular interest. The fact that they are strongly correlated leads one to expect a fair degree of consistency in distribution patterns. Taking 1970 as the point of reference, Table 3.10 classifies the countries in my sample (N=123) according to general HDI and ISC value categories (High, Medium, and Low).

Table 3.10 Distribution of Countries by HDI and ISC Categories, c1970

	ISC Category			
HDI Category	High	Med.	Low	*Total*
High	20	3	-	23
Medium	5	28	2	35
Low	0	45	20	65
Total	25	76	22	

where: High=values of 0.800+, Medium=0.500-0.799, Low= 0.000-0.499

The predicted degree of consistency is evident. All but three of the countries with High HDI values also had High ISC values.[21] The vast majority (28 of 35) of countries with Medium HDI values had Medium ISC values; most countries (45 of 65) with Low HDI values also had Medium ISC values. From the opposite perspective, the vast majority

[21]The three exceptions were Israel (ISC of 0.614), Spain (0.673), and the United States (0.741). Israel's lower ISC value was attributable to the conflicts (the Six Day War, the 1973 war) in which the country was engaged (reflected in a lower Security Index value). The United States was in a similar situation with respect to the war in Vietnam. Spain's lower ISC value was largely due to the poor civil rights record of the Franco regime (resulting in a lower Liberty Index value).

(20 of 25) of cases with High ISC values displayed High HDI values (the exceptions were Hong Kong, Malta, Costa Rica, Venezuela and Jamaica, which all displayed Medium HDI values), and almost all (20 of 22) of the countries with Low ISC values showed Low HDI values (the two exceptions were Brazil and Portugal, which both displayed Medium HDI values). The Medium ISC category provided some slight deviations: of the 76 countries, 3 had High HDI values, 28 had Medium HDI values, and 45 had Low HDI values. There were no extreme cases where a country had either a High HDI value and a Low ISC value, or a High ISC value and a Low HDI value.[22]

In relative terms, however, a country's HDI and ISC ranks are sometimes far apart (Table 3.11). In the case of Portugal (c1970), individuals were empowered to a respectable degree (HDI rank of 48), but social conditions were comparatively unsatisfactory (ISC rank of 106).[23] The top of the table (section a) is largely occupied by countries in the top third of the HDI scale whose ISC values placed them in the bottom third of the ISC range (e.g. Argentina and the USSR in 1980, and Yugoslavia, Israel and the USSR in 1990). The bottom part of the table (section b) primarily consists of countries at the lower end of the HDI scale whose ISC ranks were relatively better (principally countries in Africa).

Table 3.11 Differences in HDI and ISC Ranks: Largest Rank Discrepancies

(a) *BETTER HDI RANK*										
c1970 Country	HDI	ISC	Diff	c1980 Country	HDI	ISC	Diff	c1990 Country	HDI	ISC	Diff
Portug.	48	106	58	Argent.	36	110	74	Yugos.	30	117	87
Chile	38	90	52	USSR	27	95	68	Turkey	55	105	50
Urugu.	26	78	52	Syria	53	113	60	Iran	63	112	49
Iraq	66	117	51	Iraq	63	117	54	Israel	19	67	48
UAE	44	94	50	Urugu.	32	84	52	USSR	33	80	47
(b) *BETTER ISC RANK*										
c1970 Country	HDI	ISC	Diff	c1980 Country	HDI	ISC	Diff	c1990 Country	HDI	ISC	Diff
Gambia	122	50	72	Gambia	121	62	59	PapNG	89	42	47
Burk. F	120	75	45	Nepal	113	66	47	Gambia	116	71	45
Kenya	92	49	43	PapNG	88	42	46	Senegal	100	57	43
PapNG	80	38	42	Burk. F	119	74	45	Hondu.	83	44	39
Benin	112	70	42	Senegal	106	64	42	Haiti	96	60	36

[22]There was only one such extreme case found throughout the 1970-90 period: Yugoslavia circa 1990. Despite having a High HDI value (0.861), the country's collapse into war (its Security Index value stood at 0.000) caused its ISC value to plunge to only 0.394 (from 0.696 in 1980).

[23]Portugal's various colonial ventures took their toll in human and material costs: an estimated 150,000 people were killed in the struggles in Mozambique, Angola and Guinea Bissau. Portugal's low Security Index value (0.470) was therefore primarily a reflection of its dismal CONF value (0.000). Its Liberty Index value (0.511) was not very good either, primarily because of the poor state of civil liberties in the country (its CIVIL value was only 0.167). Portugal had the second-worst Mobility Index value (0.427) among the industrial states in my sample (marginally ahead of Greece at 0.416).

Whereas the preceding analysis focused on index levels, involving point measures, it is important to realize that *changes* in index levels over time, involving period measures, do not follow the same patterns. The correlations cited in Table 3.12, computed for the 1970-80 period, sufficiently illustrate this argument. Changes in HDI values over the period seem to be marginally (though positively) related to the changes in the ISC (0.241) and its constituent sub-indices (0.190 with the Liberty Index, 0.134 with the Security Index, and 0.365 with the Mobility Index). Furthermore, while there is a very strong and positive association between period changes in the ISC and the I-HDI (0.880), the corresponding relationship between the HDI and the I-HDI is not as strong (0.671). Changes in the ISC are very strongly correlated with changes in the Security Index (0.871), moderately correlated with changes in the Liberty Index (0.581), and weakly correlated with changes in the Mobility Index (0.290). Correlations between the ISC's three sub-indices are all very weak. In general, then, changes in the levels of one index are not necessarily followed by changes of similar magnitude in the levels of other indices.

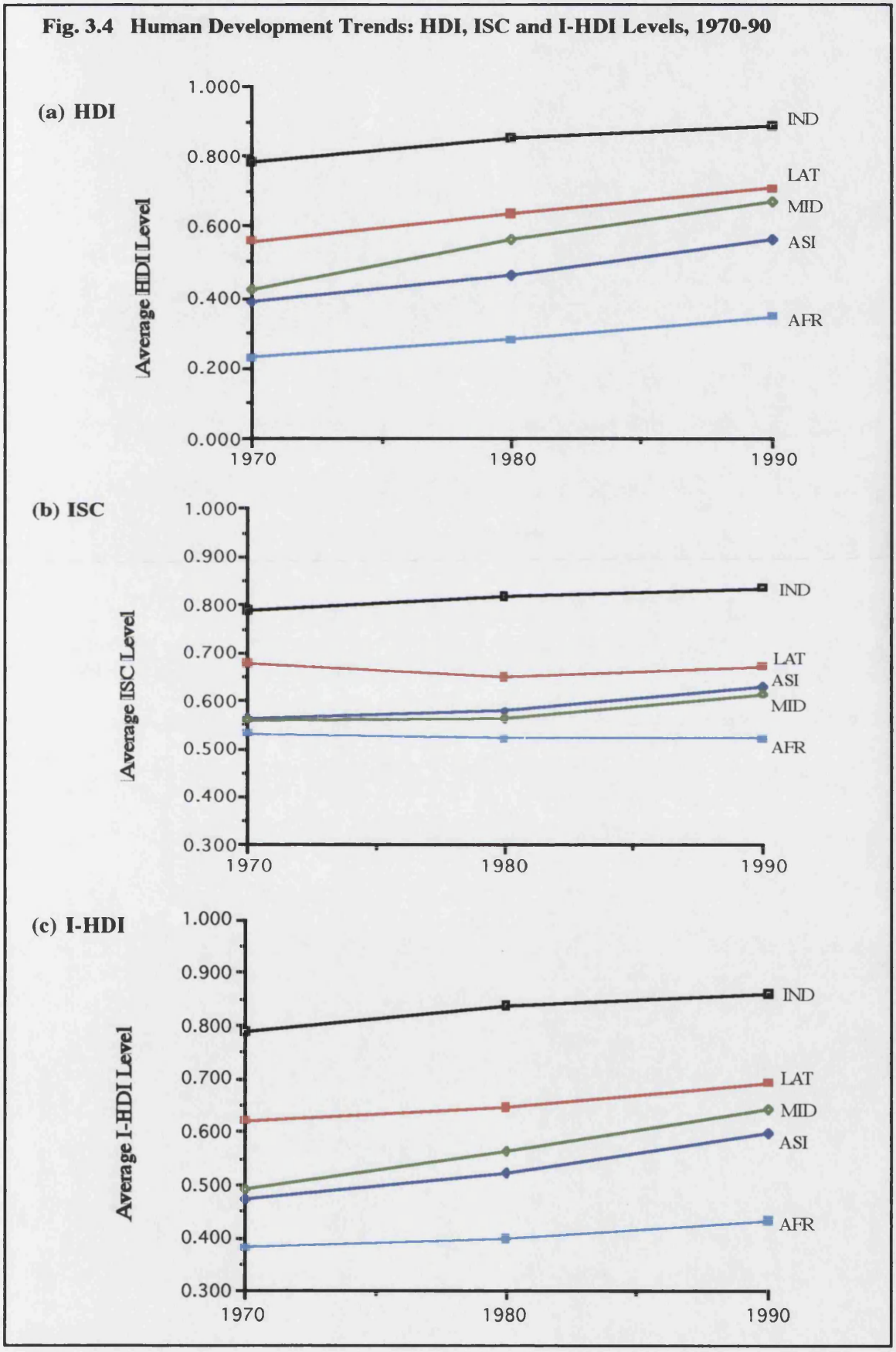
Table 3.12 Inter-Correlations Among the Measures, 1970-80 (N=123)

	(1)	(2)	(3)	(4)	(5)	(6)
(1) HDI		.241	.671	.190	.134	.365
(2) ISC	.241		.880	.581	.871	.290
(3) I-HDI	.671	.880		.535	.728	.409
(4) LIB	.190	.581	.535		.126	.192
(5) SEC	.134	.871	.728	.126		.092
(6) MOB	.365	.290	.409	.192	.092	

An Overview of Human Development Trends, 1970-90

The extent to which the overall human development situation changed throughout the 1970-90 period may be traced in Figure 3.4. The average (a) HDI, (b) ISC and (c) I-HDI levels are given for the industrialized countries (IND) and the four developing regions. The gap between them becomes immediately apparent. In 1970, for instance, the AFR region had only 29% of the IND region's HDI value, the ASI region had 49%, the MID region had 54%, and the LAT region had 71%. Like the ISC and the I-HDI, the HDI uses a fixed scale, which suggests that these gaps were bound to narrow in proportional terms by 1990: the AFR region had 39% of the IND region's HDI value, while the corresponding percentages for the other regions were 64% (ASI), 76% (MID) and 80% (LAT).

Fig. 3.4 Human Development Trends: HDI, ISC and I-HDI Levels, 1970-90



The LAT and AFR regions maintained the highest and lowest average values, respectively, among the developing regions. As shown by their ISC levels, both regions also experienced deteriorating social conditions between 1970 and 1980 (from 0.679 to 0.651 for the LAT region, and from 0.533 to 0.520 for the AFR region). The MID region produced the most interesting trends. Beginning with an average HDI value of 0.426, this region managed to close the gap considerably with the LAT region by 1980 (the respective values were 0.639 and 0.565), and by 1990 the regional averages were quite similar (0.711 and 0.673). Almost identical patterns are found for the ISC and I-HDI. Looking specifically at the latter, whereas the two regions were separated by 0.127 in 1970, they were separated by only 0.049 by 1990. The ASI region started from virtually the same index levels as the MID region in 1970, but only for the ISC did the two lines move in tandem (the gaps widened for both the HDI and I-HDI).

The absolute changes recorded by each developing region over the entire 1970-90 period are presented in Figure 3.5. The MID region had by far the highest HDI increase (0.247), followed by the ASI (0.181), LAT (0.150) and AFR (0.113) regions. The ASI region had a marginally higher ISC increase (0.065) than the MID region (0.054), while the LAT and AFR regions displayed slight ISC decreases of -0.006 and -0.013, respectively. As captured by the I-HDI, the MID region made the greatest progress overall (0.150), followed at a short distance by the ASI region (0.123). The LAT region produced a modest increase (0.072), but the AFR region appears to have made little headway (0.049).

Fig. 3.5 Changes In Human Development Levels Across Developing Regions, 1970-90

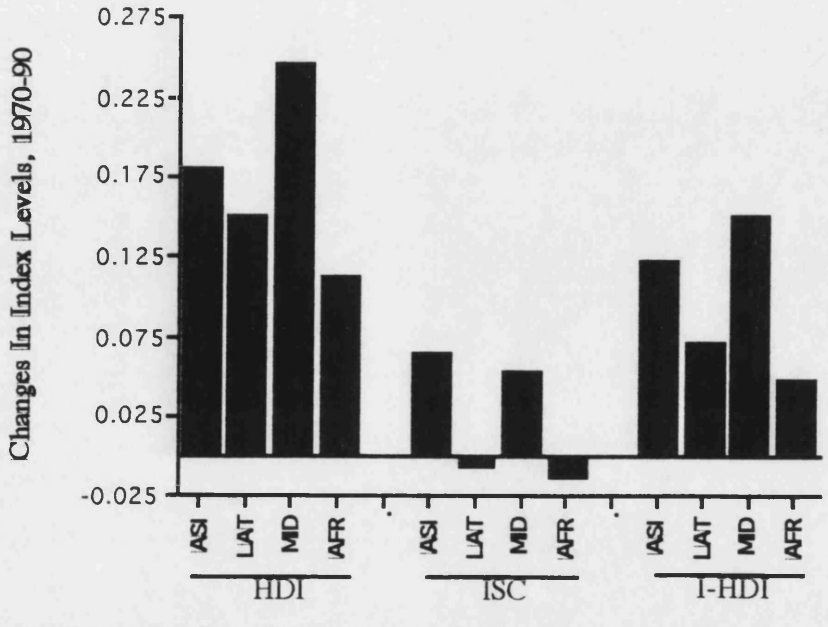


Table 3.13 presents the top and bottom 20 developing states in terms of I-HDI values for 1970 and 1990 (the HDI and ISC values are also given for reference). Thirteen of the top 20 developing states in 1970 came from the LAT region, compared to 4 from the ASI region (Hong Kong, Singapore, Sri Lanka, and Malaysia), one from the MID region (Kuwait), and 2 from the AFR region (Mauritius and South Africa). By 1990 the number of LAT countries had declined slightly to 10, with 5 coming from the ASI region (Hong Kong, South Korea, Singapore, Thailand and Malaysia), 3 from the MID region (UAE, Kuwait and Tunisia), and 2 from the AFR region (Mauritius and Botswana). The AFR region accounted for 15 of the bottom 20 countries in 1970, and 18 of the bottom 20 in 1990.

Table 3.13 The Top/Bottom 20 Developing States, 1970 and 1990

(a) 1970					(b) 1990				
R	Country	HDI	ISC	I-HDI	R	Country	HDI	ISC	I-HDI
1	Barbados	0.824	0.857	0.841	1	Barbados	0.894	0.910	0.902
2	Hong Kong	0.737	0.845	0.791	2	Hong Kong	0.875	0.863	0.869
3	Trinid. & T.	0.789	0.789	0.789	3	Trinid. & T	0.855	0.882	0.868
4	Venezuela	0.728	0.817	0.773	4	Korea, S.	0.859	0.839	0.849
5	Costa Rica	0.647	0.837	0.742	5	Costa Rica	0.848	0.803	0.825
6	Jamaica	0.662	0.816	0.739	6	Singapore	0.836	0.796	0.816
7	Kuwait	0.684	0.772	0.728	7	Chile	0.848	0.759	0.804
8	Singapore	0.682	0.751	0.717	8	Mauritius	0.778	0.815	0.797
9	Argentina	0.748	0.681	0.715	9	Venezuela	0.820	0.752	0.786
10	Mexico	0.642	0.732	0.687	10	Uruguay	0.859	0.695	0.777
11	Uruguay	0.762	0.585	0.674	11	Panama	0.816	0.731	0.774
12	Mauritius	0.524	0.787	0.656	12	Argentina	0.853	0.690	0.772
13	Colombia	0.554	0.737	0.646	13	Jamaica	0.749	0.782	0.765
14	Panama	0.592	0.671	0.632	14	UAE	0.771	0.758	0.765
15	Chile	0.682	0.560	0.621	15	Thailand	0.798	0.730	0.764
16	Cuba	0.582	0.644	0.613	16	Malaysia	0.794	0.722	0.758
17	South Africa	0.591	0.620	0.606	17	Kuwait	0.804	0.677	0.740
18	Ecuador	0.485	0.709	0.597	18	Colombia	0.813	0.636	0.724
19	Sri Lanka	0.506	0.685	0.595	19	Tunisia	0.690	0.738	0.714
20	Malaysia	0.471	0.720	0.595	20	Botswana	0.670	0.754	0.712
69	India	0.254	0.460	0.357	69	Gambia	0.215	0.619	0.417
70	Sierra Leone	0.155	0.556	0.355	70	Cen.Afr.R.	0.249	0.568	0.409
71	Cen.Afr.R.	0.196	0.512	0.354	71	Tanzania	0.306	0.501	0.403
72	Zaire	0.235	0.461	0.348	72	Liberia	0.317	0.474	0.395
73	Malawi	0.176	0.503	0.339	73	Niger0.209	0.573	0.391	
74	Niger	0.134	0.532	0.333	74	Rwanda	0.274	0.506	0.390
75	Nigeria	0.230	0.431	0.330	75	Burkina F.	0.203	0.577	0.390
76	Pakistan	0.244	0.401	0.322	76	Bangladesh	0.309	0.465	0.387
77	Afghanistan	0.131	0.496	0.313	77	Zaire	0.341	0.411	0.376
78	Bangladesh	0.199	0.415	0.307	78	Malawi	0.260	0.486	0.373
79	Guinea	0.111	0.499	0.305	79	Mali	0.214	0.529	0.372
80	Mozambiq.	0.248	0.342	0.295	80	Chad	0.212	0.489	0.350
81	Mali	0.102	0.483	0.293	81	Guinea	0.191	0.491	0.341
82	Uganda	0.213	0.336	0.274	82	Sierra Leo.	0.209	0.401	0.305
83	Somalia	0.124	0.418	0.271	83	Sudan	0.276	0.258	0.267
84	Indonesia	0.306	0.235	0.271	84	Uganda	0.272	0.252	0.262
85	Angola	0.195	0.342	0.268	85	Afghanistan	0.208	0.225	0.216
86	Chad	0.135	0.401	0.268	86	Mozambiq.	0.252	0.170	0.211
87	Sudan	0.188	0.339	0.264	87	Angola	0.271	0.120	0.195
88	Burundi	0.157	0.319	0.238	88	Somalia	0.217	0.148	0.183

The only country to register a High I-HDI value (0.800+) in 1970 was Barbados (which also displayed High HDI and ISC values). Seven developing states had surpassed the High I-HDI threshold by 1990: Barbados; Hong Kong; Trinidad and Tobago; South Korea; Costa Rica; Singapore and Chile. The biggest net change involved the number of countries with High HDI values: from only one (Barbados) in 1970 to 13 developing states by 1990. The number of countries with High ISC values increased fractionally, from 5 (Barbados, Hong Kong, Venezuela, Costa Rica and Jamaica) in 1970 to 6 (Barbados, Hong Kong, Trinidad and Tobago, South Korea, Costa Rica and Mauritius) by 1990. Fifteen of the 20 least developed states in 1970 also appeared among the 20 least developed states in 1990.

CHAPTER 4
DEMOCRACY AND LEVELS OF HUMAN DEVELOPMENT

This chapter provides a detailed examination of the relationship between democracy and levels of human development. As was noted in Chapter 2, democracy and development were viewed as complementary concepts by both political development theorists and humanists alike. Indeed, from Lipset onwards there has been an overriding belief in political science that democratic political systems are more likely to emerge as states reach ever higher developmental plateaus; in short, that democracy is the by-product of development.

Although originally defined in an economic context, with the GNP variable supporting the affluence-brings-democracy theory, many contend that this argument is in fact strengthened when the concept of human development is introduced (Diamond 1992: 458; Lane and Ersson, 1994: 215; Diamond et al, 1995: 22). The empirical evidence in this chapter, based on data for three separate reference dates (1970, 1980 and 1990), largely supports this proposition.

It will be recalled (Chapter 3) that the Level of Democracy (LoD) measure uses a seven-point scale, with 1.0 being the most democratic value and 7.0 the least democratic value. Countries will occasionally be grouped into three broad levels according to their LoD values: those with values between 1.0-2.9 (sometimes denoted as '1-2*') are classified as 'democratic states'; those with values between 3.0-5.9 (denoted as '3-5*') are classified as 'non-democratic (3-5*) states'; and those with values between 6.0-7.0 (denoted as '6-7') are classified as 'non-democratic (6-7) states'. The values for the Human Development Index (HDI), the Index of Social Conditions (ISC), and the Integrated Human Development Index (I-HDI), are all scaled from a low of 0.000 to a high of 1.000.

This chapter is divided into four parts. Section 4.1 portrays the general relationship between democracy and levels of human development from several perspectives: correlation analysis; rank group profiles; distributional patterns; and index averages per level of democracy. Section 4.2 examines whether these findings hold when one controls for countries at similar levels of economic development (GDP/C). Section 4.3 assesses whether regional distinctions alter the established relationships between the variables. Section 4.4 summarizes the chapter's findings.

4.1 General Patterns

Determining the Strength of Relationships and Lines of Causation: Correlations and Rank Group Profiles

Before moving on to a more comprehensive overview of the patterns between the variables, the strength of the general relationship between democracy and levels of human development must first be established. Table 4.1 presents the correlations between LoD values and human development values (HDI, ISC I-HDI) for two sample groups - All States and Developing States - at three points in time.

Table 4.1 Correlations Between Levels of Democracy and Human Development Values

Index		All States (N=123) c1970	c1980	c1990	Developing (N=88) c1970	c1980	c1990
HDI	r=	-0.629	-0.581	-0.631	-0.491	-0.401	-0.531
	r^2=	0.396	0.340	0.398	0.241	0.161	0.282
ISC	r=	-0.687	-0.701	-0.639	-0.514	-0.519	-0.442
	r^2=	0.473	0.492	0.408	0.264	0.269	0.195
I-HDI	r=	-0.687	-0.665	-0.674	-0.551	-0.496	-0.540
	r^2=	0.473	0.442	0.454	0.304	0.246	0.291

When the All States sample is considered, it is hardly surprising that relatively strong and negative correlations are produced for all three indices (indicating that lower, more democratic values correspond to higher index values), given the respective positions of democratic OECD states and authoritarian sub-Saharan states at the top and bottom of each index scale (Table 4.2 overleaf). However, when the influence of the OECD states is removed for the Developing States sample, the correlations are somewhat weaker, though still noteworthy. This observation holds across all indices and for all three dates.

The correlations between LoD and HDI values are consistently strong for the All States sample, with a high of -0.631 for 1990. Interestingly, Diamond (1992) and Lane and Ersson (1994) find correlation coefficients of similar magnitude: 0.710 and 0.590 respectively (the coefficients are positive because their measures of democracy are inverted). The relationship is weaker for the Developing States sample: HDI values may explain between 16% and 28% of the variation in levels of democracy (compared to between 34% and 40% for the All States sample).

Table 4.2 The Most/Least Developed Countries, 1970-90

Index	1970 Rank	Country	Value	LoD	1980 Rank	Country	Value	LoD	1990 Rank	Country	Value	LoD
HDI	1	Canada	0.887	1.0	1	Canada	0.911	1.0	1	Canada	0.932	1.0
	2	Sweden	0.881	1.0	2	Japan	0.906	1.2	2	Switzerl	0.931	1.0
	3	USA	0.881	1.0	3	USA	0.905	1.0	3	Japan	0.929	1.0
	4	Denmark	0.879	1.0	4	Norway	0.901	1.0	4	Norway	0.928	1.0
	5	Norway	0.878	1.0	5	Sweden	0.899	1.0	5	Sweden	0.928	1.0
	6	Japan	0.875	1.5	6	Switzer.	0.897	1.0	6	France	0.927	1.0
	7	UK	0.873	1.0	7	France	0.895	1.0	7	Australia	0.926	1.0
	8	Switzer.	0.872	1.5	8	UK	0.892	1.0	8	USA	0.925	1.0
	9	France	0.871	1.0	9	Australia	0.890	1.0	9	Netherl	0.923	1.0
	10	Netherl.	0.867	1.0	10	Iceland	0.890	1.0	10	UK	0.919	1.0
	114	Burundi	0.157	7.0	114	Benin	0.197	7.0	114	C.Afr.Re.	0.249	6.5
	115	Sierra L.	0.155	3.0	115	Sierra L.	0.177	5.0	115	Somalia	0.217	7.0
	116	Chad	0.135	6.0	116	Afghan.	0.165	7.0	116	Gambia	0.215	2.6
	117	Niger	0.134	6.5	117	Niger	0.163	7.0	117	Mali	0.214	6.5
	118	Afghan.	0.131	5.5	118	Somalia	0.162	7.0	118	Chad	0.212	6.9
	119	Somalia	0.124	4.5	119	Burk. F	0.151	5.0	119	Sierra L.	0.209	6.4
	120	Burk. F	0.116	5.0	120	Chad	0.151	6.7	120	Niger	0.209	6.9
	121	Guinea	0.111	7.0	121	Gambia	0.148	2.2	121	Afghan.	0.208	6.9
	122	Gambia	0.107	2.0	122	Guinea	0.148	7.0	122	Burk.F	0.203	6.7
	123	Mali	0.102	7.0	123	Mali	0.146	7.0	123	Guinea	0.191	6.9
ISC	1	Canada	0.913	1.0	1	Canada	0.918	1.0	1	Canada	0.967	1.0
	2	Sweden	0.910	1.0	2	Switzer.	0.907	1.0	2	Netherl.	0.942	1.0
	3	Australia	0.905	1.0	3	Sweden	0.907	1.0	3	Japan	0.938	1.0
	4	Belgium	0.903	1.0	4	Norway	0.906	1.0	4	Belgium	0.936	1.0
	5	Germ.,W	0.902	1.0	5	Belgium	0.906	1.0	5	Norway	0.935	1.0
	6	Norway	0.899	1.0	6	Denmark	0.905	1.0	6	Denmark	0.931	1.0
	7	New Z.	0.898	1.0	7	Japan	0.905	1.2	7	Austria	0.928	1.0
	8	Iceland	0.895	1.0	8	Netherl.	0.905	1.0	8	Finland	0.928	1.0
	9	Netherl.	0.893	1.0	9	Austria	0.896	1.0	9	Switzer.	0.922	1.0
	10	Japan	0.892	1.5	10	USA	0.896	1.0	10	Sweden	0.920	1.0
	114	Chad	0.401	6.0	114	Banglad.	0.418	4.0	114	Iraq	0.427	7.0
	115	Syria	0.391	7.0	115	Indones.	0.385	5.0	115	Zaire	0.411	6.7
	116	Iraq	0.390	7.0	116	Iran	0.375	6.2	116	Sierra Le.	0.401	6.4
	117	Egypt	0.379	6.5	117	Iraq	0.356	6.7	117	Yugosl.	0.394	6.2
	118	Mozam.	0.342	7.0	118	Sudan	0.348	6.0	118	Sudan	0.258	5.0
	119	Angola	0.342	7.0	119	Somalia	0.332	7.0	119	Uganda	0.252	3.9
	120	Sudan	0.339	6.5	120	Mozam.	0.296	6.9	120	Afghan.	0.225	6.9
	121	Uganda	0.336	6.5	121	Afghan.	0.283	7.0	121	Mozamb.	0.170	6.2
	122	Burundi	0.319	7.0	122	Angola	0.258	6.8	122	Somalia	0.148	7.0
	123	Indon.	0.235	6.0	123	Uganda	0.211	6.2	123	Angola	0.120	7.0
I-HDI	1	Canada	0.900	1.0	1	Canada	0.915	1.0	1	Canada	0.950	1.0
	2	Sweden	0.896	1.0	2	Japan	0.906	1.2	2	Japan	0.934	1.0
	3	Norway	0.889	1.0	3	Norway	0.904	1.0	3	Netherl.	0.933	1.0
	4	Denmark	0.885	1.0	4	Sweden	0.903	1.0	4	Norway	0.931	1.0
	5	Australia	0.884	1.0	5	Switzer.	0.902	1.0	5	Switzer.	0.926	1.0
	6	Japan	0.884	1.5	6	USA	0.900	1.0	6	Belgium	0.926	1.0
	7	Netherl.	0.880	1.0	7	Denmark	0.897	1.0	7	Sweden	0.924	1.0
	8	New Z.	0.879	1.0	8	Netherl.	0.896	1.0	8	Austria	0.923	1.0
	9	Iceland	0.879	1.0	9	Belgium	0.890	1.0	9	Denmark	0.921	1.0
	10	Germ.,W	0.879	1.0	10	Austria	0.888	1.0	10	Australia	0.921	1.0
	114	Egypt	0.324	6.5	114	Guinea	0.328	7.0	114	Mali	0.372	6.5
	115	Mozam.	0.295	7.0	115	Banglad.	0.326	4.0	115	Chad	0.350	6.9
	116	Mali	0.293	7.0	116	Mali	0.319	7.0	116	Guinea	0.341	6.9
	117	Uganda	0.274	6.5	117	Chad	0.297	6.7	117	Sierra L.	0.305	6.4
	118	Somalia	0.271	4.5	118	Sudan	0.288	6.0	118	Sudan	0.267	5.0
	119	Indon.	0.271	6.0	119	Mozam.	0.272	6.9	119	Uganda	0.262	3.9
	120	Angola	0.268	7.0	120	Somalia	0.247	7.0	120	Afghan.	0.216	6.9
	121	Chad	0.268	6.0	121	Angola	0.235	6.8	121	Mozam.	0.211	6.2
	122	Sudan	0.264	6.5	122	Afghan.	0.224	7.0	122	Angola	0.195	7.0
	123	Burundi	0.238	7.0	123	Uganda	0.213	6.2	123	Somalia	0.183	7.0

The correlations between levels of democracy and ISC values are very similar. In the All States sample, the coefficients range from a high of -0.701 (1980) to a low of -0.639 (1990), suggesting that between 41-49% of the variation in LoD values may be explained by ISC rates. In contrast, the r-squared values for the Developing States sample suggest that between 20-27% of the variation in LoD values may be explained by ISC rates. While there is a relationship between democracy and better overall social conditions, the correlations between levels of democracy and the ISC's three constituent indices fluctuate greatly: ranging from extremely weak correlations for the Security Index, to moderate correlations for the Mobility Index, to very strong correlations (of course) for the Liberty Index.[1]

Given the strong correlations found for its two constituent indices, one would expect to find roughly similar correlations between LoD and I-HDI values. Indeed, just under half (44-47%) of the variation in levels of democracy for the All States sample may be explained by I-HDI values (compared to between 25% and 30% for the Developing States sample). Although a fairly strong relationship does exist between democracy and human development, this relationship is far from automatic (especially for developing countries).

Exploring this point further, the direction of causation may be confirmed by charting this relationship through a series of rank-group profiles, thereby allowing one to trace *average levels of democracy* throughout the continuum of human development values. This involves moving from a simple consideration of the most and least developed states (Table 4.2 above) to the broader human development spectrum. Accordingly, in the following series of illustrations (Figure 4.1) countries were first ranked by their respective index values (HDI, ISC and I-HDI) and divided into five 'rank groups', with the top 25-ranked countries comprising the R1-25 group. The average level of democracy (LoD value) for each rank group of countries was then calculated.

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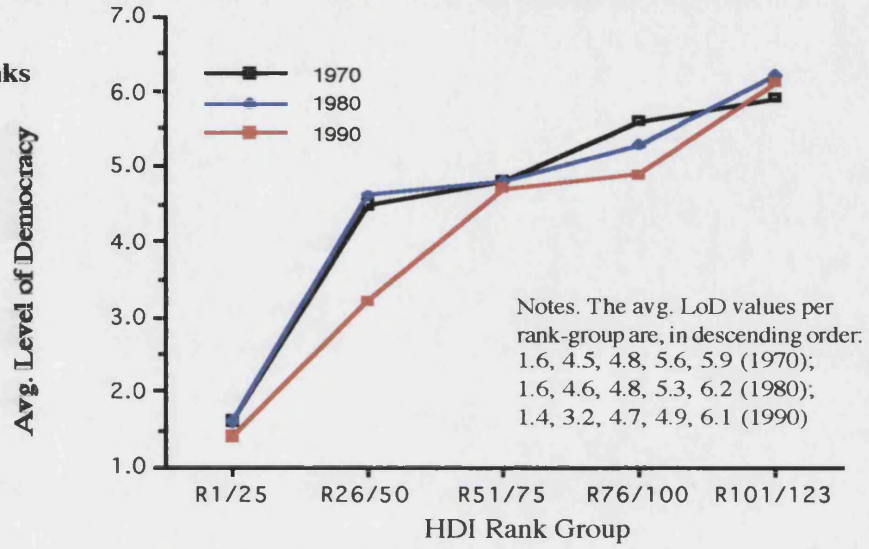
[1]The correlations between LoD values and the ISC's constituent indices (and their respective component indicators) are presented below (All States, N=123). In general, it may be argued that: there is virtually no relationship between democracy and the Security Index (SEC), as all regimes appear equally vulnerable to both types of insecurity, Conflict (CONF) and Inflation (INFL); there is a very strong relationship between democracy and the Liberty Index (LIB), although this association is much stronger for the civil rights (CIVIL) measure than for the social deprivation measure (child survival, SURV); and there is a strong relationship between democracy and the Mobility Index (MOB), with similar correlations observed for all three indicators, Gender Equity Index (GEND), % of Non-Agricultural Employment (%NAgr), Tertiary Enrollment (TERT).

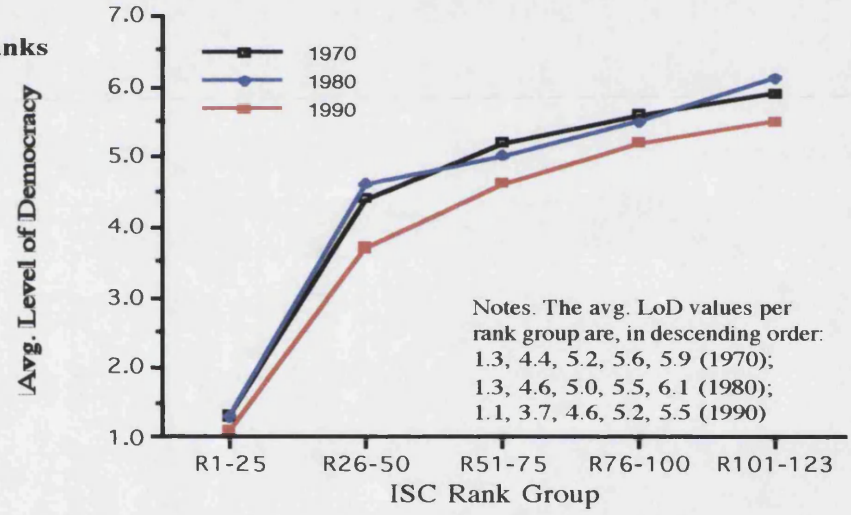
Index/Indicator		c1970	c1980	c1990	Index/Indicator		c1970	c1980	c1990
SEC	r=	-0.087	-0.162	-0.111	**MOB**	r=	-0.591	-0.559	-0.623
	r^2=	0.008	0.026	0.012		r^2=	0.292	0.252	0.288
CONF	r=	-0.110	-0.215	-0.221	GEND	r=	-0.540	-0.502	-0.537
	r^2=	0.012	0.046	0.049		r^2=	0.292	0.252	0.288
Inflation	r=	0.024	0.019	0.043	%NAgr	r=	-0.554	-0.541	-0.573
	r^2=	0.001	0.000	0.002		r^2=	0.307	0.292	0.329
LIB	r=	-0.859	-0.878	-0.883	TERT	r=	-0.458	-0.480	-0.604
	r^2=	0.738	0.771	0.780		r^2=	0.210	0.230	0.365
CIVIL	r=	-0.870	-0.909	-0.924					
	r^2=	0.757	0.826	0.854					
SURV	r=	-0.540	-0.562	-0.560					
	r^2=	0.292	0.316	0.314					

Fig. 4.1 Average Levels of Democracy By Human Development Ranks

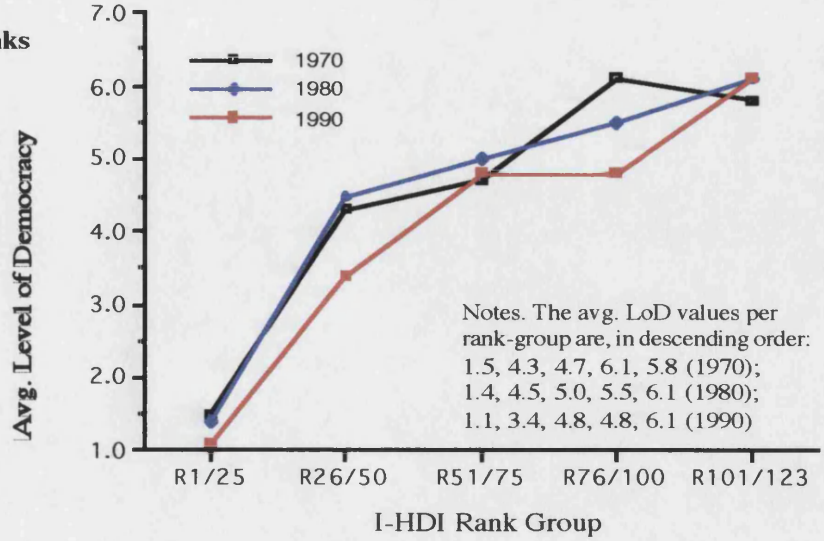
(a) HDI Ranks



(b) ISC Ranks



(c) I-HDI Ranks



For all three dates and across all indices, the resulting patterns are consistent and unambiguous: the resulting slopes, though not perfectly linear, ascend from left to right (i.e., from the highest to lowest rank groups), thereby confirming that: (1) democratic LoD averages correspond to higher index values; and (2) LoD values, on average, become progressively more authoritarian (higher) as one descends levels of human development.

The HDI rank-group profile is depicted in graph (a). The top 25 HDI-ranked countries exhibited average LoD values of 1.6 in both 1970 and 1980 and 1.4 in 1990. At the other end of the HDI scale, the R101-123 group exhibited average LoD values of 5.9 in 1970, 6.2 in 1980, and 6.1 in 1990. Unmistakably, as HDI ranks decreased, LoD values increased towards the most authoritarian range. In 1990, for example, the LoD averages per HDI-rank group were: 1.4 (R1-25), 3.2 (R26-50), 4.7 (R51-75), 4.9 (R76-100) and 6.1 (R101-123).

The same basic trend is evident in the ISC rank-group profile (graph b). Democratic averages were found for the R1-25 group (1.3 for 1970 and 1980, 1.1 for 1990), while quite authoritarian averages were found for the R101-123 group (5.9 for 1970, 6.1 for 1980, and 5.5 for 1990). The rank groups located between these two poles produced LoD averages in the 3.0-5.9 range. The LoD averages for 1990 were: 1.1 (R1-25), 3.7 (R26-50), 4.6 (R51-75), 5.2 (R76-100), and 5.5 (R101-123).

The I-HDI rank-group profile (graph c) is similar to the HDI and ISC profiles. The R1-25 group displayed democratic averages (1.5 for 1970, 1.4 for 1980, and 1.1 for 1990), whereas the R101-123 group showed decidedly authoritarian averages (5.8 for 1970, 6.1 for both 1980 and 1990). LoD averages became progressively less democratic as I-HDI ranks decreased in 1990 (as was found for the other dates as well): 1.1 (R1-25), 3.4 (R26-50), 4.8 (R51-75), 4.8 (R76-100), and 6.1 (R101-123).

Distribution Patterns and Average Index Levels

Precisely how states were distributed by level of democracy and human development values over the 1970-90 period will now be considered. Whereas the previous section dealt with relative positions, in the form of index ranks, distribution patterns will hereby be depicted by absolute value ranges: countries with index values of 0.800 or more are deemed to be at the High Level (H); those with values between 0.500 and 0.799 are at the Medium Level (M); and those with values between 0.000 and 0.499 are at the Low Level (L).[2]

[2]These are the same category distinctions employed by the UNDP with respect to the Human Development Index.

Figure 4.2 (overleaf) illustrates the distribution patterns by human development level. Regardless of date and index, the High index levels were characterized by the overwhelming presence of democratic states (largely OECD), whereas the Low levels were characterized by strongly authoritarian states (mainly from sub-Saharan Africa). In other words, relatively few non-democratic states managed to cross the 0.800+ value threshold, and relatively few democratic states were found below the 0.500 barrier. Taking c1970 as the reference date: 22 of 23 states (96%) at the High HDI level were democratic (excepting Spain), as were 24 of the 25 states (96%) at the High ISC level (excepting Hong Kong), and all 21 states at the High I-HDI level; at the other extreme, there were only five democratic states (Malaysia, India, Bangladesh, Gambia and Turkey) at the Low HDI level, two (India and Bangladesh) at the Low ISC level, and three (Gambia, India and Bangladesh) at the Low I-HDI level. By 1980, democratic states constituted a smaller percentage of the states found at the High HDI level (74%) and at the High I-HDI level (83%), principally due to the inclusion of several Communist states, but they still constituted 92% of all states at the High ISC level.[3] There were, in turn, only three democratic states (India, Gambia, and Papua New Guinea) at the Low HDI level, and two (India and Gambia) at the Low I-HDI level; no democratic states were found at the Low ISC level. The picture had barely changed by 1990: 35 of the 47 (74%) states at the High HDI level were democratic, as were 30 of the 32 (94%) states at the High ISC level and 29 of the 35 (83%) states at the High I-HDI level.[4] India and Gambia continued to be the only democracies at the Low I-HDI level, and were joined by Papua New Guinea at the Low HDI level; three conflict-stricken democratic states - Turkey, El Salvador and Peru - were found at the Low ISC level.

The three levels of democracy were more finely balanced across the Medium index levels (slightly less so for the ISC). Democratic states comprised between 26-36% of all states found at the Medium HDI level, between 14-26% of the states at the Medium ISC level, and between 24-36% of the states found at the Medium I-HDI level. The two non-democratic LoD groups were represented in largely equal measure. At the Medium HDI level there were thirteen non-democratic (3-5*) states and twelve non-democratic (6-7) states in 1970, thirteen states apiece in 1980, and eleven non-democratic (3-5*) states and twelve non-democratic (6-7) states in 1990.

The Low index levels were largely occupied by the most authoritarian (non-democratic (6-7)) states. They accounted for between 62% (1980) and 68% (1990) of all states at the Low HDI Level, 59% (1990) and 84% (1980) of all states at the Low ISC Level, and 63% (1980) to 72% (1970) of all states at the Low I-HDI Level. Democratic

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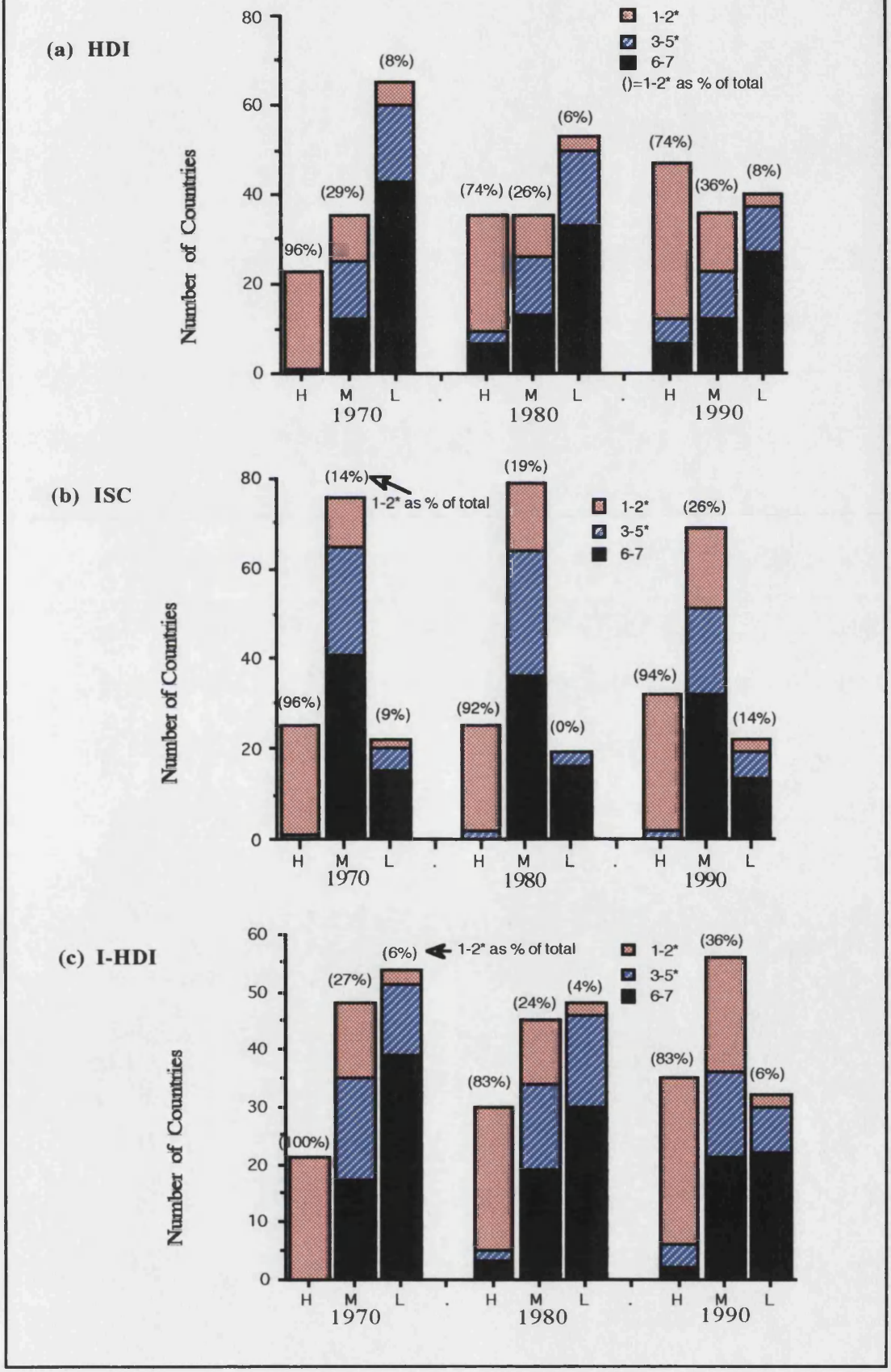
[3]The new entrants at the High HDI level in 1980 were Poland (0.836), the USSR (0.841), Bulgaria (0.823), Hungary (0.838), the GDR (0.859), Czechoslovakia (0.848), Uruguay (0.830) and Hong Kong (0.830). The five new states at the High I-HDI level were Spain (0.826), Hong Kong (0.836), Poland (0.806), the GDR (802) and Czechoslovakia (0.801). Spain (0.800) and Hong Kong (0.842) were the only two cases found at the High ISC level outside the democratic (1-2*) LoD range.

[4]There were five new non-democratic entrants at the High HDI level by 1990 - Panama (0.816), Chile (0.848), Singapore (0.836), Yugoslavia (0.861) and Kuwait (0.804) - and three at the High I-HDI level - Singapore (0.816), Hungary (0.836) and Chile (0.804).

Fig. 4.2 Distribution of Countries By Levels of Democracy and Human Development Levels



states typically comprised between 6-8% of the states at the Low HDI Level, 0-14% of the states at the Low ISC level, and 4-6% of the states at the Low I-HDI level. The non-democratic (3-5*) states comprised around one-quarter to one-third of all states at the Low index levels for any given date.

Table 4.3 interprets the distribution patterns by level of democracy, showing the percentage of states from each LoD group found at the High, Medium and Low index levels over the 1970-90 period. A solid majority of all democratic states (57-69%) were found at the High HDI, ISC and I-HDI levels (0.800+); between 24-39% were found at Medium index levels (0.500-0.799); and only 0-14% were found at Low index levels (0.000-0.499). In most cases, fewer than 10% of all non-democratic states displayed High index values; moreover, no non-democratic (3-5*) state had a High HDI or I-HDI value in 1970, and no non-democratic (6-7) state had a High ISC value (any date) or a High I-HDI value in 1970. The non-democratic (3-5*) states were roughly divided between the Medium and Low levels for the HDI, but were overwhelmingly found at the Medium level for the ISC (70-85%); for two dates (save for 1980), the majority of non-democratic (3-5*) states (56-60%) were found at the Medium I-HDI level. A significant majority (60-77%) of all non-democratic (6-7) states had Low HDI values, Medium ISC values (69-73%), and Low I-HDI values (65-70% for 1970 and 1980, but 49% for 1990).

Table 4.3 Distribution of States (%) By Level of Democracy and Human Development Level

LoD	Index Level	HDI 1970	HDI 1980	HDI 1990	ISC 1970	ISC 1980	ISC 1990	I-HDI 1970	I-HDI 1980	I-HDI 1990
1-2*	High	59%	68	69	65	61	59	57	66	57
	Med.	27	24	25	30	39	35	35	29	39
	Low	14	8	6	5	0	6	8	5	4
		100%	100	100	100	100	100	100	100	100
3-5*	High	0%	9	22	3	6	7	0	6	15
	Med.	43	39	41	80	85	70	60	45	56
	Low	57	52	37	17	9	23	40	49	29
		100%	100	100	100	100	100	100	100	100
6-7	High	2%	11	13	0	0	0	0	6	4
	Med.	21	25	27	73	69	71	30	29	47
	Low	77	64	60	27	31	29	70	65	49
		100%	100	100	100	100	100	100	100	100

Notes. For each index: High=0.800+; Medium=0.500/0.799; Low=0.000/0.499

Hence, to simplify the observations: most democratic states had High human development values, most non-democratic (3-5*) states had Medium-range values, and most non-democratic (6-7) states had Low values. Or expressed slightly differently: there was a dramatic decrease in the number of democratic states as one descended human development levels, with the reverse pattern for the most authoritarian regimes.

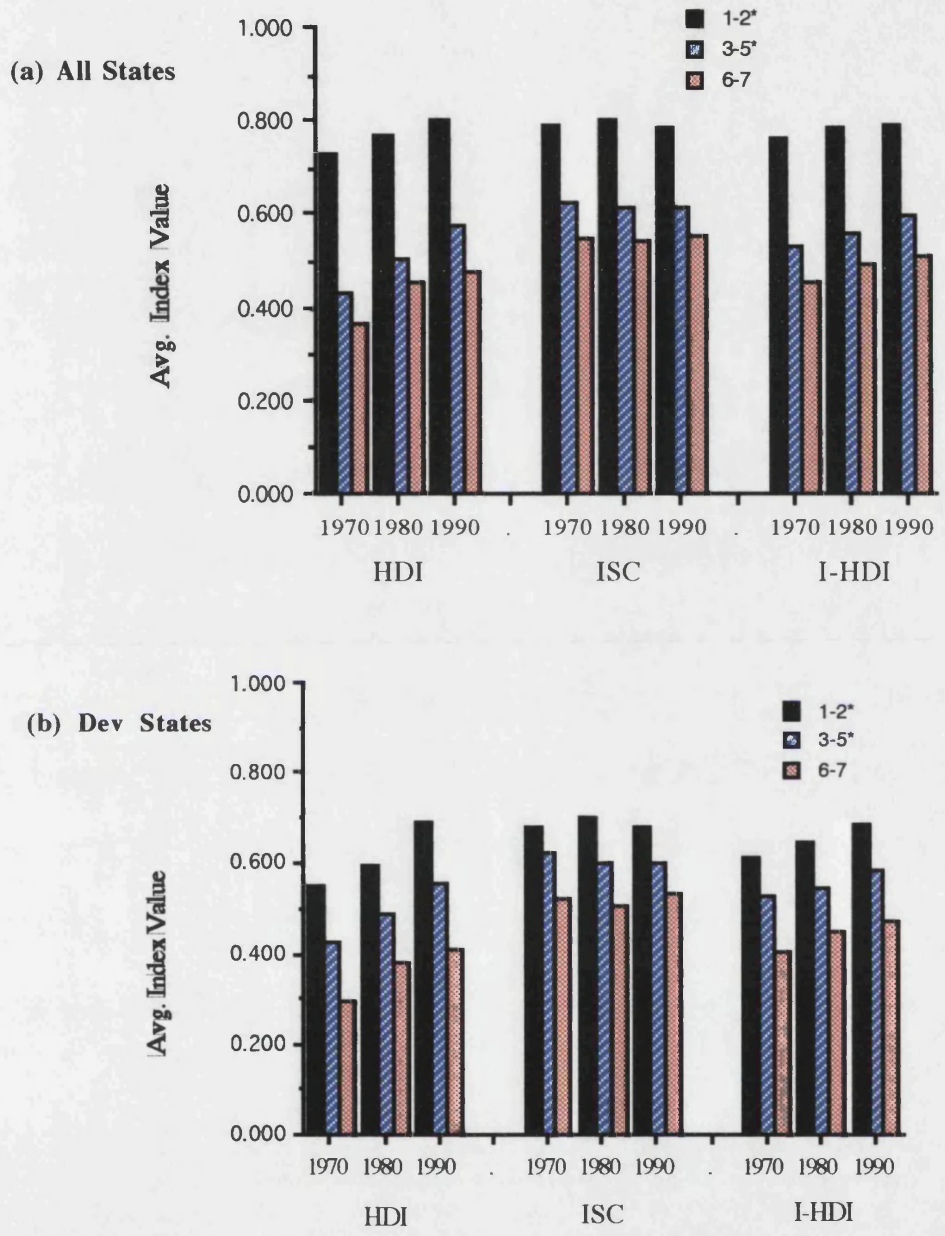
There is perhaps one basis of comparison which addresses Lipset's famous dictum most explicitly: the average human development values produced by each level of democracy. Figure 4.3 below depicts the average HDI, ISC and I-HDI values for each level of democracy over the 1970-90 period. To avoid some of the criticism which accompanied Lipset's own choice of samples, two different sample groups are considered here: graph (a) portrays the results for all states (developed and developing, N=123), whereas graph (b) portrays the results for only the developing states (N=88).[5] Regardless of the sample, Lipset's basic premise could be validated for this period: democracies were, on average, more 'developed' than non-democratic states. Moreover, the least democratic states (LoD 6-7) were also, on average, the least developed. These observations hold across all three indices and for all dates.

The gaps between the levels of democracy were quite large in the All States sample. Democratic states had average HDI values of 0.732 in 1970, 0.772 in 1980 and 0.799 in 1990. Conversely, the non-democratic (3-5*) states displayed average HDI values of 0.435, 0.504 and 0.577, whereas the non-democratic (6-7) states showed average HDI values of 0.365, 0.453 and 0.472. Interpreted in percentage terms, non-democratic (3-5*) states were, on average, between 59% (1970) and 72% (1990) as developed as democratic states, whereas non-democratic (6-7) states were between 50% (1970) and 59% (1990) as developed. The average ISC values for democratic states (0.791, 0.803, 0.787) were also much greater than the averages for the non-democratic LoD groups (0.625, 0.613, 0.613 for non-democratic (3-5*) states, and 0.548, 0.541, 0.551 for non-democratic (6-7) states). In percentage terms, however, the gaps were smaller than for the HDI: non-democratic (3-5*) states were 76-79% as developed as democratic states; non-democratic (6-7) states were 67-70% as developed. The findings for the I-HDI were similar: with average I-HDI values between 0.530 and 0.595, non-democratic (3-5*) states were 70-75% as developed as democratic states (average I-HDI values between 0.761 and 0.793); non-democratic (6-7) states were 60-64% as developed (I-HDI averages between 0.456 and 0.511).

The average values for all three LoD groups were significantly lower in the Developing States sample. With the impact of the industrialized democracies removed, the

[5]The breakdown of countries in the All States sample (N=123) by level of democracy (1-2*, 3-5*, 6-7) is as follows: 37, 30, 56 for 1970; 38, 33, 52 for 1980; and 51, 27, 45 for 1990. The breakdown for the Developing States sample (N=88) is: 14, 29, 45 for 1970; 14, 31, 43 for 1980; and 25, 25, 38 for 1990.

Fig. 4.3 Average Human Development Values By Level of Democracy, 1970-90



gaps in human development levels were also noticeably less pronounced.[6] The non-democratic (3-5*) states were, on average, 78-81% as developed as democratic states in terms of the HDI, 86-92% as developed in terms of the ISC, and 84-86% as developed in terms of the I-HDI. The gaps between the democratic and the non-democratic (6-7) states

[6]The HDI averages by level of democracy (1-2*, 3-5*, 6-7) were: 0.545, 0.425, 0.290 for 1970; 0.590, 0.485, 0.380 for 1980; and 0.687, 0.556, 0.408 for 1990. The ISC averages were: 0.680, 0.625, 0.521 for 1970; 0.701, 0.601, 0.507 for 1980; and 0.678, 0.604, 0.531 for 1990. The I-HDI averages were: 0.613, 0.525, 0.405 for 1970; 0.645, 0.543, 0.444 for 1980; and 0.683, 0.580, 0.469 for 1990.

narrowed to a slighter extent: non-democratic (6-7) states were, on average, 53-64% as developed in terms of the HDI; 72-78% as developed in terms of the ISC; and 66-69% as developed in terms of the I-HDI. Lipset's hypothesis appears to be applicable to the developing world as well.

There is another comparison worth making, specifically regarding the developing world. By employing an independent standard threshold - the average index value for all developing states (the 'developing threshold') - one may evaluate the percentage of countries from each level of democracy with 'above average' human development values. Table 4.4 presents the results for three dates.

Table 4.4 Percentage of 'Above Average' States By Level of Democracy, Developing Threshold (1970-90)

LoD	HDI			ISC			I-HDI		
	1970	1980	1990	1970	1980	1990	1970	1980	1990
1-2*	79%	79	84	79	86	72	79	86	80
3-5*	59	52	56	72	61	60	66	48	56
6-7	24	35	29	27	28	37	16	28	26

Note. The average index values for all developing states were, from 1970 to 1990: 0.376, 0.450 and 0.529 for the HDI; 0.581, 0.571, and 0.593 for the ISC; and 0.478, 0.511 and 0.561 for the I-HDI.

As expected, given the results in Figure 4.3(b) above, far more developing democracies, proportionally, exhibited 'above average' human development values irrespective of date. Indicatively, 79% of all developing democracies had HDI values greater than 0.376 (the developing average) in 1970, compared to 59% of all non-democratic (3-5*) states and only 24% of all non-democratic (6-7) states. Over the entire period, between 79-84% of all democratic states surpassed the developing HDI averages, 72-86% surpassed the developing ISC averages, and 79-86% surpassed the developing I-HDI averages. The percentages for the two non-democratic groups were markedly lower. Just over half (52-59%) of all non-democratic (3-5*) states exceeded the developing HDI averages, between 60-72% exceeded the developing ISC averages, and 48-66% exceeded the developing I-HDI averages. The figures for non-democratic (6-7) states were dismal: 24-35% surpassed the developing HDI averages; 27-37% surpassed the developing ISC averages; and only 16-28% surpassed the developing I-HDI averages.

Thus, over three-quarters of all developing democracies consistently showed above average values across all three indices and for all three dates, compared to between one-half and two-thirds of all non-democratic (3-5*) states, and between one-quarter and one-third of non-democratic (6-7) states. To put these findings into further perspective: more than three times as many developing democracies, proportionally, displayed above average I-HDI values in 1990 than did the most authoritarian (LoD 6-7) states.

4.2 Controlling For Levels of Economic Development

This section explores the relationship between democracy and human development once levels of economic development are controlled for. Since economic development is strongly correlated with both democracy and human development, it is imperative to properly account for its influence on the relationship between the two.

Democracy, Human Development and Economic Development: The General Relationships

Before examining the democracy-human development relationship in the context of economic development, hereinafter defined by the GDP per capita (GDP/C) variable,[7] the triangular relationship between the three variables should be established. While much has been written on the relationship between democracy and economic development (Chapters 1 and 2), comparatively little has been written about the relationship between human development and economic development, for two main reasons: (1) the relatively recent interest in the concept of human development (and its corresponding measures); and (2) the assumption, taken for granted, that one form of development complements the other. Both relationships will be explored in tandem from several different perspectives.

Table 4.5 presents the correlations between economic development and democracy, and between economic development and human development (all three measures), for two samples and three dates. Clearly, while economic development is linked to both democracy and human development, the bonds are weaker in the former case.

Table 4.5 Correlations Between Economic Development (GDP/C) and Democracy, Human Development

Variable		All (N=123) c1970	c1980	c1990	Developing (N=88) c1970	c1980	c1990
LoD	r=	-0.533	-0.478	-0.556	-0.105	-0.022	-0.128
	r^2=	0.284	0.228	0.310	0.011	0.001	0.017
HDI	r=	0.781	0.647	0.666	0.583	0.460	0.555
	r^2=	0.610	0.419	0.443	0.340	0.212	0.308
ISC	r=	0.669	0.589	0.682	0.348	0.262	0.428
	r^2=	0.448	0.347	0.465	0.121	0.069	0.184
I-HDI	r=	0.779	0.662	0.715	0.539	0.427	0.549
	r^2=	0.606	0.438	0.511	0.291	0.182	0.301

[7]Per capita GDP has been calculated according to the World Bank Atlas method (UN 1993a).

When all of the states in the sample are considered, moderately strong and negative correlations are produced, showing the tendency for lower (more democratic) LoD values to correspond to higher GDP/C levels, and vice versa. But when developing states are considered alone, extremely weak correlations are found for all three dates, suggesting that the level of economic development has little or nothing to do with levels of democracy in the developing world. At most, economic development may explain 31% of the variation in levels of democracy for the All States sample, but only around 1.7% of the variation for the Developing States sample. Recalling the earlier correlations in Table 4.1, it may therefore be argued that the relationship between democracy and human development is stronger than the one between democracy and economic development, a point acknowledged in several other studies as well (Diamond, 1992: 458; Lane and Ersson, 1994: 215; Diamond et al, 1995: 22). For example, I-HDI values may explain between 44-47% of the variation in levels of democracy for the All States sample (25-30% for Developing states), whereas GDP/C rates may explain only between 23-31% of the variation (0-2% for Developing states).

The second set of correlations undoubtedly show that, as many have speculated (Hopkins and Van Der Hoeven, 1983: 3; Moon and Dixon, 1985: 678), the relationship between economic development and human development is strong. What is truly interesting, however, is that the correlations shed light on the proposition that: "the level of economic development is the major determinant of quality of life in developing nations" (Williamson 1987: 221). This view is shared by Lane and Ersson (1994: 98), who argue more specifically that human development "is determined more by the overall economic situation than by politics". In fact, the level of economic development may account for roughly 42-61% of the variation in HDI values (21-34% for developing states), 35-47% of the variation in ISC values (7-18% for developing states), and 43-61% of the variation in I-HDI values (18-30% for developing states). By way of comparison, the correlations in Table 4.1 indicate that HDI values may explain 34-40% of the variation in levels of democracy (16-28% for developing states), ISC values may explain 41-49% (20-27% for developing states), and I-HDI values may explain 44-47% (25-30% for developing states). Hence, the relationship between economic development and human development is stronger than the relationship between democracy and human development, but not when social conditions (ISC) are measured in isolation or when developing states comprise the sample (in both cases, economic development and democracy explain roughly as much of the variation).

In effect, the level of democracy is more closely related to human development than to economic development; in turn, economic development is more closely related to human development than is the level of democracy. Of the three relationships, the strongest is between economic development and human development (r^2 = 44-61% for the I-HDI), and the weakest is between democracy and economic development (r^2 = 23-31%); the relationship between democracy and human development falls in the middle (r^2 = 44-47% for the I-HDI). For developing states, however, the democracy-human development relationship (r^2 = 25-30% for the I-HDI) is basically as strong as the economic

development-human development relationship (r^2 = 18-30% for the I-HDI). The relationships between the variables may be classified as follows: 'strong' between human development and economic development ('moderately strong' for developing states); 'strong' between democracy and human development ('moderately strong' for developing states); and 'moderately strong' between democracy and economic development ('extremely weak' for developing states).

Moving beyond generalities, Figure 4.4 depicts the relationships over the 1970-90 period, focusing specifically on the average GDP/C rates produced by (a) each level of democracy (LoD) and (b) each level of human development (I-HDI). For comparative purposes, both samples - All States and Developing States - are portrayed side by side.

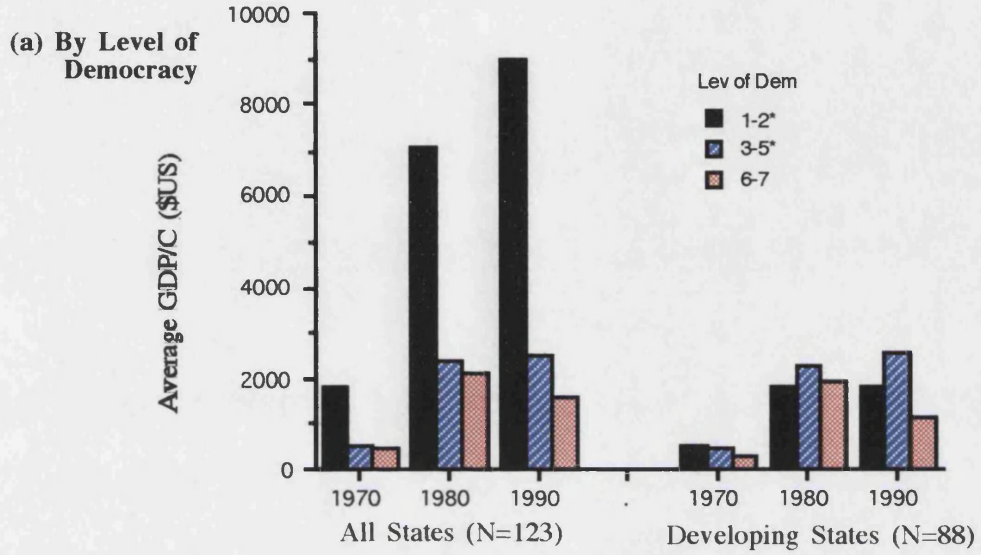
Democracy is associated with higher levels of economic development (graph a), but only when the sample consists of the entire spectrum of states. When the impact of the industrialized democracies is removed, the picture changes dramatically. In the All States sample, the average GDP/C for democracies was $1831 in 1970, rising to $7110 in 1980 and then to $8990 in 1990. By contrast, the non-democratic (3-5*) states had average GDP/C rates of $503 in 1970, $2389 in 1980, and $2525 in 1990. The least democratic states (LoD 6-7) were also the poorest, with average GDP/C rates of $472 (1970), $2088 (1980), and $1599 (1990). For any given date, democratic states were three times as wealthy as non-democratic (3-5*) states and between three and five times as wealthy as the non-democratic (6-7) states.

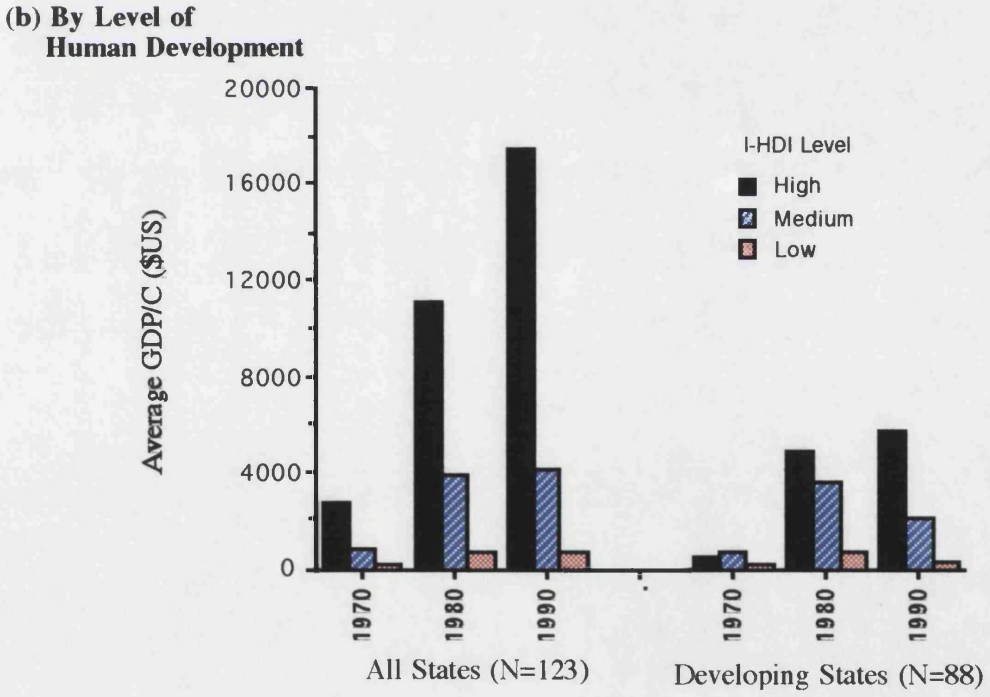
When industrialized states were omitted from the sample, developing democracies were not, on average, wealthier than the non-democratic states. Only in 1970 did the democratic states produce the highest average GDP/C rate ($518, compared to $481 for non-democratic (3-5*) states and $328 for non-democratic (6-7) states). For both other dates, the non-democratic (3-5*) states were the wealthiest; the average GDP/C rates by level of democracy (1-2*, 3-5*, 6-7) were: $1836, $2278 and $1944 for 1980; and $1839, $2543, $1108 for 1990.

Unsurprisingly, the most developed states in terms of human development were also the wealthiest, whereas the least developed states were also the poorest (graph b). Regarding the All States sample, High-level countries (0.800+) were, on average, between three and four times as wealthy as Medium-level countries (0.500-0.799), and between twelve and twenty-five times as wealthy as Low-level countries (0.000-0.499). The average GDP/C rates by I-HDI level (High, Medium, Low) were: $2708, $843, $220 for 1970; $11017, $3915, $710 for 1980; $17460, $4076, $673 for 1990.

The basic trends were similar for the sample of developing states, but on a much less pronounced scale. Since there was only one developing state (Barbados) found at the High I-HDI level in 1970, comparisons between the LoD groups are largely moot: Barbados had

Fig. 4.4 Average Level of Economic Development (GDP/C) By Level of Democracy and Human Development, 1970-90





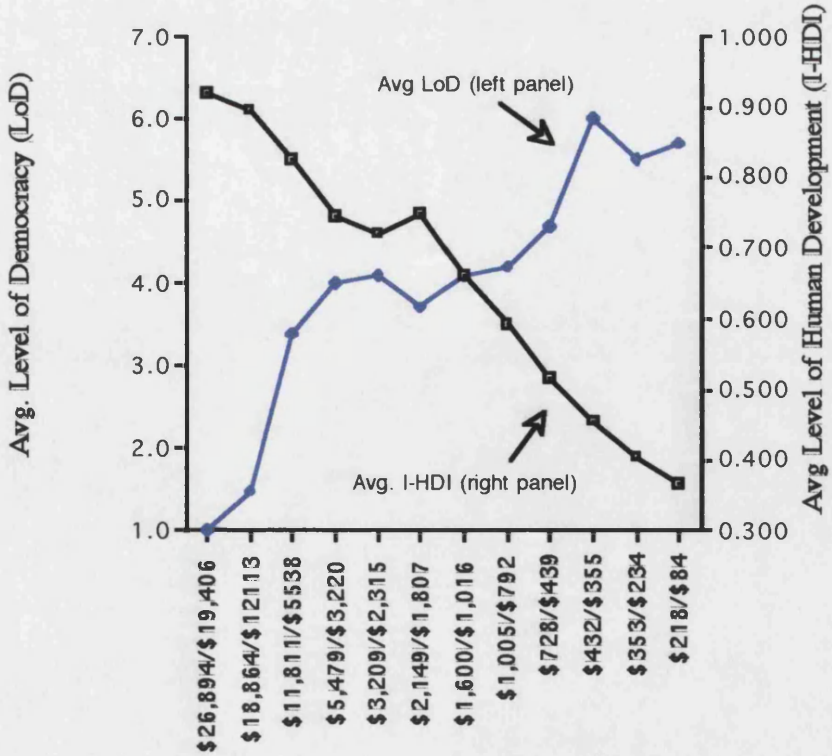
a lower GDP/C ($553) than the Medium-level countries (average GDP/C of $712).[8] The three developing states with High I-HDI values in 1980 - Barbados, Hong Kong, Trinidad

[8]Interestingly, one of the non-democratic (3-5*) states, the UAE ($2976), was almost six times as wealthy as Barbados, but was only two-thirds as 'developed' (I-HDI of 0.578, against 0.841 for Barbados).

and Tobago - displayed an average GDP/C of $4891, whereas the Medium-level countries had an average GDP/C of $3601 and Low-level countries had an average GDP/C of $667. By 1990, the gaps between the I-HDI levels had increased: the seven countries found at the High I-HDI level - the three from 1980 plus South Korea, Costa Rica, Singapore, and Chile - had an average GDP/C of $5725; with an average of $2087, the Medium-level countries (N=49) were less than half as wealthy; the Low-level countries (N=32) had an average GDP/C of only $292.

As indicated by the correlations and average GDP/C rates, the relationship between economic development and human development is more 'linear' than the relationship between economic development and democracy. This argument may be demonstrated more concretely by tracing the average levels of democracy and human development across the specific levels of economic development. By employing a double-Y axis format, Figure 4.5 allows both relationships to be portrayed together using data for 1990 (the income brackets have been separated by rank intervals, from R1-10 or $26,894-$19,406 to R111-R123 or $218-$84).

Fig. 4.5 Tracing Average Levels of Democracy and Human Development Across Levels of Economic Development (c1990)



Looking first at the left-hand panel, it becomes readily apparent that, while democratic LoD averages were clustered at the top of the income scale and strongly authoritarian averages were clustered at the bottom, the mid-income levels produced LoD averages in the 3.5-4.5 range; in other words, middle-income levels were not characterized by the predominance of any one particular level of democracy.[9] From strongly democratic averages (1.0 and 1.5) for the two wealthiest groups, the slope tracing average levels of democracy abruptly ascends before flattening off along the middle-income range (3.5-4.5), gradually ascending thereafter before reaching the three poorest income groups (LoD values of 6.0, 5.5 and 5.7).

The slope tracing average human development values (right-hand panel) follows the same general path as the slope for average levels of democracy (which uses an inverted scale): from an average I-HDI value of 0.919 for the wealthiest states, the slope descends to the upper-middle income range, where it flattens out (I-HDI averages of 0.743-0.746) before continuing its progressively downward spiral towards the poorest income level (I-HDI average of 0.367).[10]

These trends are mirrored in the actual distribution of countries by *general* level of economic development. Accordingly, in a format which will be used at various points throughout this research, countries in the sample have been slotted into one of four income categories, from the richest (INC 1) to the poorest (INC 4) group, depending on their respective GDP/C rankings for the date in question: R1-30 (INC 1), R31-60 (INC 2), R61-90 (INC 3), R91-123 (INC 4); see Appendix P for the list of all country GDP/C rates.[11] By adopting relative yardsticks, in the form of GDP/C ranks, the number of countries in each income category remains constant despite the changing income levels over time or the changing composition of each quartile (since some countries may change income categories from one date to the next).

Figure 4.6 provides a vivid and concise snapshot of the findings by (a) level of democracy and (b) level of human development. Irrespective of date, when states were classified by income-control group (INC 1 to INC 4), democracies were overwhelmingly

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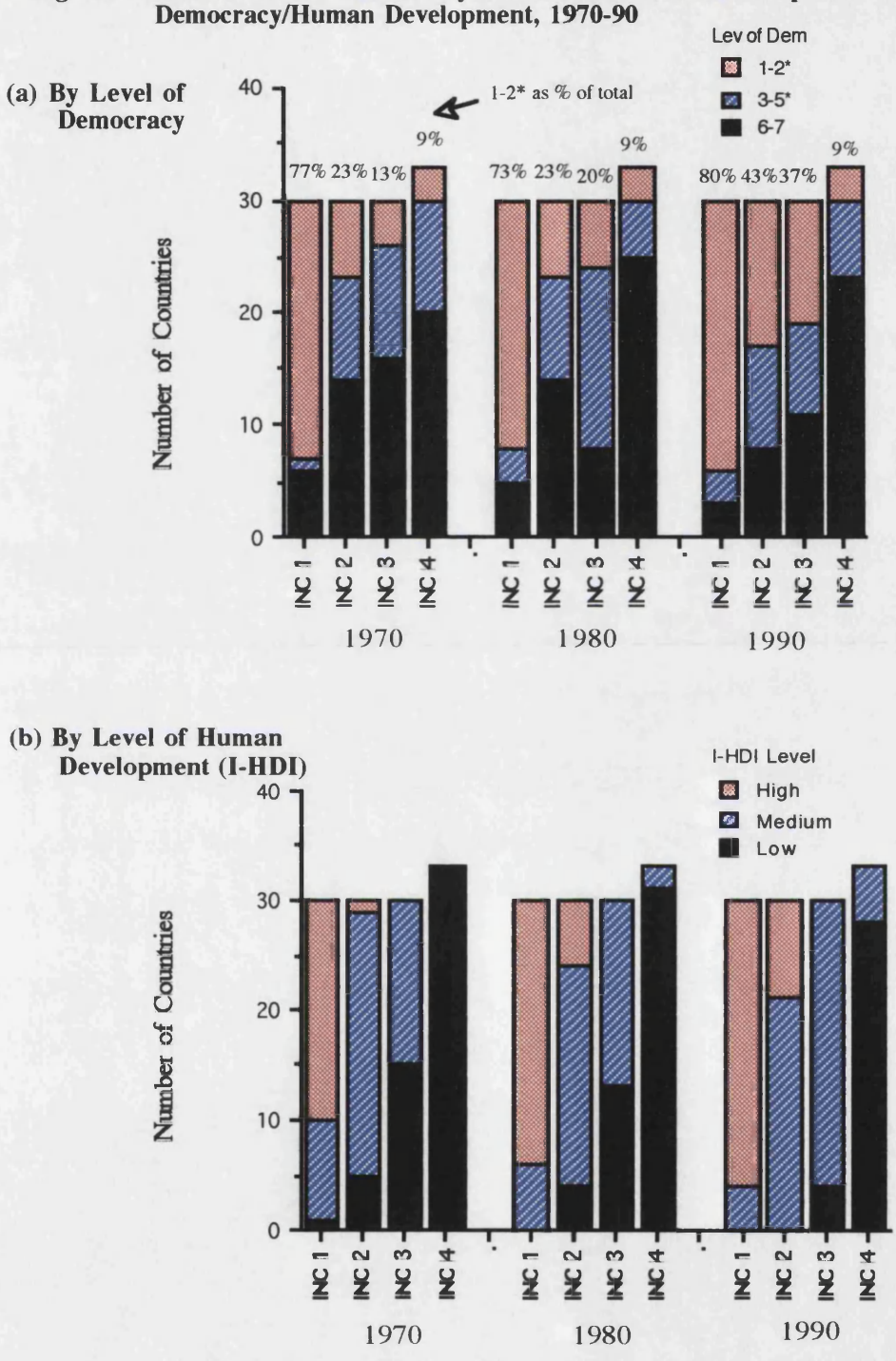
[9]The validity of these results was confirmed by looking at data for 1970 and 1980 as well. The general patterns were very similar, although the slopes tended to be slightly more erratic in the middle-income ranges for both dates (average LoD values of 3.5-5.5). The actual LoD averages by decreasing income group were: 2.2, 1.6, 3.5, 3.3, 5.6, 5.2, 3.8, 5.7, 5.2, 5.2, 5.3 and 6.1 for 1970; and 2.5, 1.6, 2.8, 3.7, 5.2, 5.7, 3.8, 4.8, 5.3, 6.3, 5.2, and 6.2 for 1980.

[10]The results for 1970 and 1980 confirm this basic tendency, but with one slight deviation: the second wealthiest income group (R11-20) displayed a slightly higher I-HDI average than the wealthiest income group (R1-10). The actual I-HDI averages by decreasing income group were: 0.829, 0.858, 0.738, 0.707, 0.614, 0.561, 0.528, 0.496, 0.461, 0.376, 0.361 and 0.333 for 1970; 0.825, 0.860, 0.815, 0.749, 0.655, 0.670, 0.612, 0.518, 0.489, 0.367, 0.429 and 0.332 for 1980.

[11]The exact breakdown of income categories for each date is as follows:

Rank	Category	1970 (High/Low)	1980	1990
1-30	INC 1	$4922(U.S)/$1299(Venez.)	$29159(UAE)/$5462(Argen)	$26894(Swit)/$5538(Saud.Ar)
31-60	INC 2	$1133(Gre)/$388(Iran)	$5305(Gabon)/$1451(Ghana)	$5479(Malta)/$1807(CostaR)
61-90	INC 3	$378(Nicar)/$187(Philip.)	$1444(Ecuad)/$517(Indon.)	$1600(Jam.)/$439(Haiti)
91-123	INC 4	$175(Camer)/$54(BurkF)	$515(Som.)/$124(Ugan)	$432(Guinea)/$84(Mozam)

Fig. 4.6 Distribution Of Countries By Levels of Economic Development and Democracy/Human Development, 1970-90



situated in the INC 1 category and rarely found in the INC 4 category; in between, they were scattered among the INC 2 and INC 3 categories. Democracies constituted 73-80% of all states in the INC 1 category, 23-43% of the states in the INC 2 category, 13-37% of the states in the INC 3 category, and only 9% of the states in the INC 4 category. At the other extreme, between 61-76% of all very poor states (INC 4) displayed strongly authoritarian

(6-7) LoD values, whereas only 10-20% of wealthy states (INC 1) did so (mainly Middle Eastern autocracies and Communist states). From another perspective, between one-half and three-fifths of all democracies during this period were 'wealthy', while under one-tenth were 'poor' (Table 4.6 below provides the breakdown by N and %). In contrast, approximately one-half of all non-democratic (6-7) states were 'poor' (save for 1970, when the figure stood at around one-third the total), and only around one-tenth were 'wealthy'. The majority of non-democratic (3-5*) states were neither wealthy nor poor (INC 2 and INC 3).

Table 4.6 Distribution of Countries By Level of Democracy and Economic Development (N and %)

	1970			1980			1990		
Econ Level	Level of Democracy 1-2*	3-5*	6-7	Level of Democracy 1-2*	3-5*	6-7	Level of Democracy 1-2*	3-5*	6-7
INC 1	23 (62%)	1 (3)	6 (11)	22 (58)	3 (9)	5 (10)	24 (47)	3 (11)	3 (7)
INC 2	7 (19)	9 (31)	14 (25)	7 (18)	9 (27)	14 (27)	13 (25)	9 (33)	8 (18)
INC 3	4 (11)	10 (33)	16 (28)	6 (16)	16 (49)	8 (15)	11 (22)	8 (30)	11 (24)
INC 4	3 (8)	10 (33)	20 (36)	3 (8)	5 (15)	25 (48)	3 (6)	7 (26)	23 (51)
	37(100%)	30(100)	56(100)	38 (100)	33 (100)	52 (100)	51 (100)	27 (100)	45 (100)

Graph 4.6 (b) illustrates the extent to which high levels of economic development correspond to high levels of human development. Twenty (1970), 24 (1980), and 26 (1990) of the thirty wealthiest states (INC 1) were also located at the High I-HDI Level; that is, between 67% and 87% of all wealthy states had I-HDI values of at least 0.800. Equally as revealing is the fact that almost all of the very poorest states (INC 4) were found at the Low I-HDI Level. In 1970, all 33 of the states in the INC 4 category (GDP/C $432/84) had I-HDI values of 0.499 or less. The figures for the other two dates were only marginally better: 94% (1980) and 85% (1990) of the INC 4 states had Low I-HDI values. The two middle income categories balanced the two extremes: the vast majority of countries in the upper-middle income category (INC 2) displayed Medium I-HDI values (0.799/0.500), whereas states in the lower-middle income category (INC 3) displayed either Medium or Low I-HDI values (save for 1990, when almost all displayed Medium values).

In brief, wealthy states tend to have democratic systems and high levels of human development, poor states tend to have strongly authoritarian regimes and very low levels of human development; middle-income states may not be classified by level of democracy, but tend to display mid-range human development values. While there are exceptions, of course,

this rule generally holds. All but two of the ten wealthiest countries in 1970 were democratic, as were seven of the ten wealthiest countries in 1980 and all ten of the wealthiest countries in 1990 (Table 4.7). Alternatively, none of the ten poorest countries were democracies. From the human development perspective, it is interesting to note that the non-democratic states in the wealthiest samples - Kuwait and the UAE in 1970, joined by Saudi Arabia in 1980 - all displayed considerably lower I-HDI values (within the Medium I-HDI level) than the democracies (all of which had values in the High I-HDI range). Irrespective of date, all ten of the poorest states had very low I-HDI values.

Table 4.7 The Wealthiest/Poorest Countries In Comparative Perspective, 1970-90

1970					1980					1990				
Inc Ra	Country	GDP/ C	LoD	I-HDI Value	Inc Ra	Country	GDP/ C	LoD	I-HDI Value	Inc Ra	Country	GDP/ C	LoD	I-HDI Value
1	USA	$4922	1.0	0.811	1	UAE	$29159	5.3	0.704	1	Switz.	$26894	1.0	0.926
2	Sweden	$4164	1.0	0.896	2	Kuwait	$20688	6.2	0.768	2	Finland	$23258	1.0	0.920
3	Canada	$3960	1.0	0.900	3	Switz.	$16083	1.0	0.902	3	Japan	$23052	1.0	0.934
4	Kuwait	$3856	5.5	0.728	4	Sweden	$15028	1.0	0.903	4	Sweden	$22538	1.0	0.924
5	Switz.	$3351	1.0	0.876	5	Norway	$14124	1.0	0.904	5	Norway	$21636	1.0	0.931
6	Luxemb	$3238	2.0	0.854	6	Iceland	$14105	1.0	0.837	6	USA	$20739	1.0	0.896
7	Denma	$3209	1.0	0.885	7	Germ,W	$13216	1.0	0.882	7	Canada	$20739	1.0	0.950
8	Austral	$3133	1.0	0.884	8	Denma	$12943	1.0	0.897	8	Iceland	$20598	1.0	0.866
9	Germ,W	$3042	1.0	0.879	9	Luxemb	$12454	1.3	0.872	9	Denma	$20373	1.0	0.921
10	UAE	$2976	7.0	0.578	10	S.Arabia	$12373	7.0	0.578	10	Germ,W	$19406	1.0	0.919
114	Chad	$89	6.0	0.268	114	Afghan	$225	6.5	0.224	114	Malawi	$195	6.9	0.373
115	Indone	$79	6.0	0.271	115	Sudan	$209	6.0	0.288	115	Somalia	$173	7.0	0.183
116	Nepal	$75	6.5	0.360	116	Chad	$205	6.7	0.297	116	Uganda	$165	3.9	0.262
117	Haiti	$73	7.0	0.394	117	Malawi	$201	6.5	0.344	117	Chad	$165	6.9	0.350
118	Malawi	$71	7.0	0.339	118	Mozamb	$199	6.9	0.272	118	Nepal	$164	5.3	0.447
119	Burundi	$70	7.0	0.238	119	BurkFa	$185	5.0	0.365	119	Nigeria	$157	4.2	0.471
120	Lesotho	$66	4.0	0.475	120	Banglad	$179	4.0	0.326	120	Madaga	$139	3.4	0.493
121	Mali	$63	7.0	0.293	121	Myanm	$165	7.0	0.445	121	Tanzan	$107	6.0	0.403
122	Rwanda	$58	7.0	0.362	122	Nepal	$131	5.3	0.406	122	Zaire	$102	6.7	0.376
123	BurkFa	$54	5.0	0.358	123	Uganda	$124	6.2	0.213	123	Mozamb	$84	6.2	0.211

There is, moreover, some degree of overlap between the groups of states found here and those cited earlier in Table 4.2. Five of the ten wealthiest states in 1970 - Sweden, Canada, Denmark, Australia, and West Germany - also made the list of top ten developed states (I-HDI). Four states made both top ten lists in 1980 - Switzerland, Sweden, Norway and Denmark - and six did so in 1990 - Switzerland, Japan, Sweden, Norway, Canada, and Denmark. On the other hand, four states (Chad, Indonesia, Burundi and Mali) had the dubious distinction of appearing among the ten poorest and least developed states in 1970,

six states (Afghanistan, Sudan, Chad, Mozambique, Bangladesh and Uganda) shared this distinction in 1980, and four (Somalia, Uganda, Chad and Mozambique) did so in 1990.

Controlling For Levels of Economic Development: The Evidence, 1970-90

Having established the general relationships between the three variables, it is possible to address a key question in the development debate: How do countries at similar levels of economic development, but maintaining altogether different political systems, compare in terms of human development scores? Table 4.8 presents the complete set of average human development values produced by each level of democracy in the four income categories.

Table 4.8 Average Human Development Values By Level of Democracy, Controlling For Economic Development

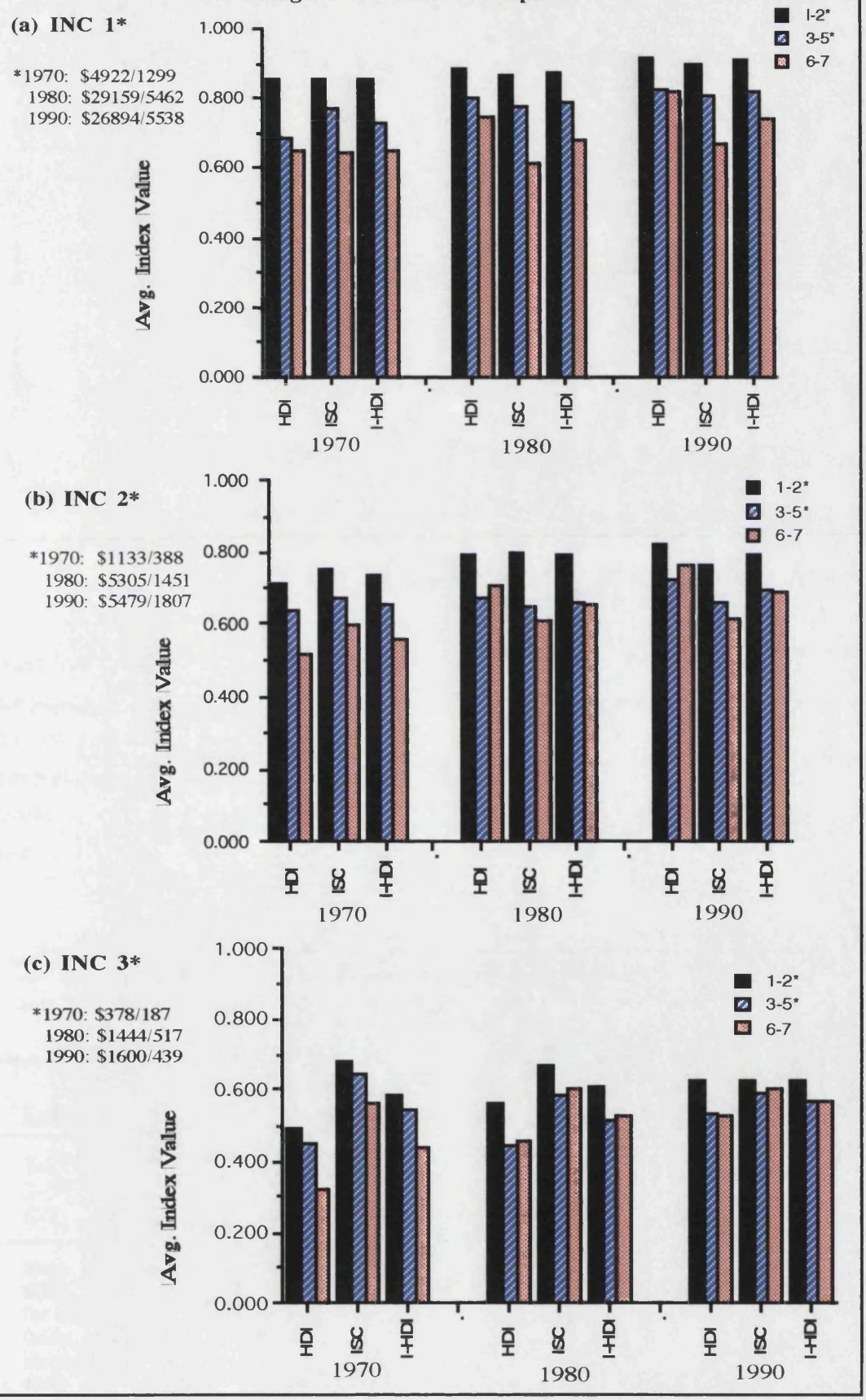
		1970			1980			1990		
		Level of Democracy			Level of Democracy			Level of Democracy		
Index	Inc Cat	1-2*	3-5*	6-7	1-2*	3-5*	6-7	1-2*	3-5*	6-7
HDI	INC 1	0.850	0.684	0.652	0.883	0.800	0.745	0.913	0.827	0.815
	INC 2	0.712	0.639	0.516	0.794	0.676	0.707	0.820	0.726	0.765
	INC 3	0.493	0.447	0.320	0.562	0.443	0.461	0.630	0.536	0.527
	INC 4	0.187	0.213	0.208	0.332	0.212	0.249	0.421	0.326	0.299
ISC	INC 1	0.857	0.772	0.645	0.866	0.777	0.613	0.899	0.806	0.669
	INC 2	0.756	0.672	0.596	0.800	0.649	0.607	0.764	0.665	0.616
	INC 3	0.683	0.647	0.559	0.666	0.588	0.605	0.626	0.592	0.609
	INC 4	0.510	0.545	0.477	0.620	0.529	0.469	0.582	0.485	0.485
I-HDI	INC 1	0.854	0.728	0.648	0.874	0.788	0.679	0.906	0.817	0.742
	INC 2	0.734	0.655	0.556	0.797	0.662	0.657	0.792	0.696	0.690
	INC 3	0.588	0.547	0.439	0.614	0.515	0.533	0.628	0.564	0.568
	INC 4	0.348	0.379	0.343	0.476	0.370	0.359	0.501	0.406	0.392

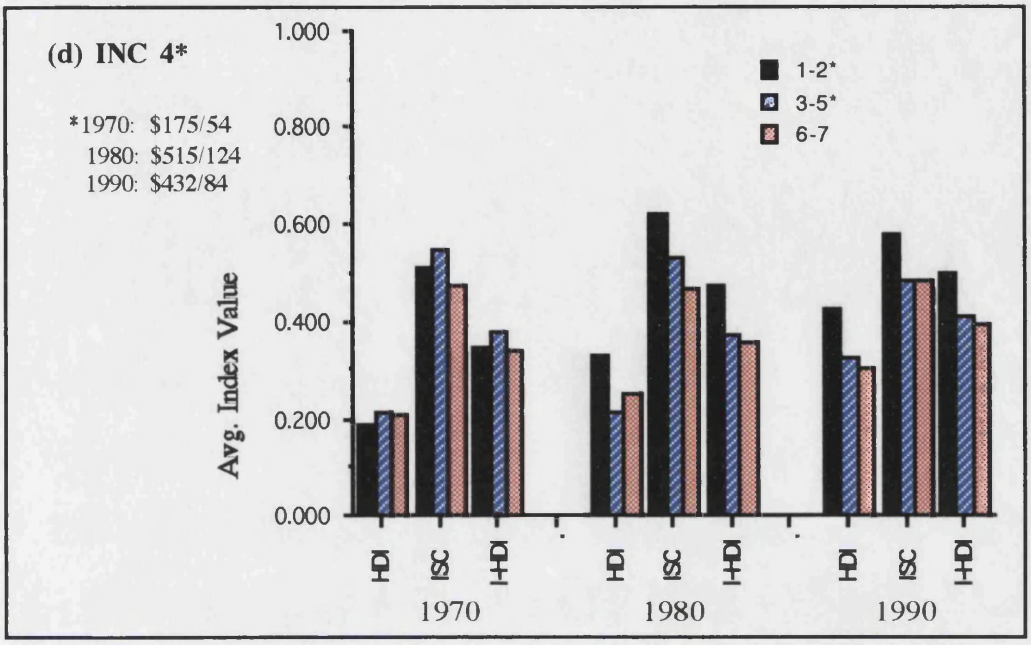
Across every income category and for every date, democratic states consistently exhibited the highest index averages. This phenomenon was not observed on only one occasion: for c1970, the three democratic states in the INC 4 category ($175/54) - India, Bangladesh and Gambia - did not produce the highest average HDI, ISC or I-HDI value. In every other comparative case, the democratic states in each income category displayed higher average human development values than non-democratic states.

The gaps between the democratic and non-democratic countries become readily apparent when the findings are interpreted by income category (Figure 4.8 below). Focusing specifically on the I-HDI measure, it may be argued that in the wealthiest quartile (INC 1), democracies were 11-17% more developed than non-democratic (3-5*) states and 22-32% more developed than non-democratic (6-7) states (primarily the former Communist states and several oil-rich Middle Eastern autocracies). In the next highest quartile (INC 2), the index averages suggest that democracies were 12-20% more developed than non-democratic (3-5*) states and 15-32% more developed than non-democratic (6-7) states. Similar gaps are observed at the lower-middle income level (INC 3): democracies were 7-19% more developed than non-democratic (3-5*) states and 11-34% more developed than non-democratic (6-7) states. In the poorest quartile (INC 4), aside from the findings for 1970, democratic states were between one-quarter and one-third more developed than non-democratic (3-5*) and non-democratic (6-7) states. Bringing the two other indices into this analysis, one finds that, when the percentage differences across all four income groups are averaged out for the period, democratic states were, in terms of the HDI, around 20% more developed than the non-democratic (3-5*) states and 26% more developed than non-democratic (6-7) states and, in terms of the ISC, 13% more developed than non-democratic (3-5*) states and 25% more developed than non-democratic (6-7) states.

Furthermore, it appears that having a democratic form of government may sometimes compensate for a lower level of economic development. Consider some of the evidence for 1970: the democratic states in the INC 2 category produced a higher HDI average (0.712) than the non-democratic (3-5*) and non-democratic (6-7) states in the INC 1 category (at 0.684 and 0.652), and the democratic states in the INC 3 category produced an HDI average (0.493) roughly comparable to that found for the non-democratic (6-7) states in the INC 2 category (0.516). Moving on to the ISC, the average for the democratic states in the INC 2 category (0.756) was higher than the average for the non-democratic (6-7) states in the INC 1 category (0.645), and was comparable to the average produced by the non-democratic (3-5*) states (0.772). Likewise, the democratic states in the INC 3 category exhibited a higher ISC average (0.683) than the non-democratic (3-5*) and non-democratic (6-7) states in the INC 2 category (at 0.672 and 0.596). Regarding the I-HDI, the democratic states in the INC 2 category displayed a higher average (0.734) than the two non-democratic groups of states in the INC 1 category (0.728 and 0.648), and democratic states in the INC 3 category displayed a higher average (0.588) than the non-democratic (6-7) states in the INC 2 category (0.556). Similar cases can be observed for both 1980 and 1990 (note especially that, in 1980, democratic states in the INC 4 category actually produced a higher ISC average than the non-democratic (6-7) states in the INC 1 category).

Fig. 4.7 Average Human Development Values By Level of Democracy, Controlling For Economic Development





How does a given state's human development score compare against the average found for all states at the same general level of economic development? By employing an independent standard - the average for all countries in the same income category (the 'income threshold') - it is possible to determine just how many countries from each level of democracy displayed 'above average' human development scores, relative to their national wealth. The results are expressed as percentages in Table 4.9, where the focus is on the developing world (N=88).

Table 4.9 Percentage of 'Above Average' Developing States By Level of Democracy, Income Threshold (1970-90)

	HDI			ISC			I-HDI		
LoD	1970	1980	1990	1970	1980	1990	1970	1980	1990
1-2*	79%	71	68	64	86	72	79	71	72
3-5*	62	32	36	72	48	44	69	42	36
6-7	31	35	29	36	42	58	27	37	39

Note. The average HDI values for each income category were, from INC 1 to INC 4: 0.805, 0.599, 0.385 and 0.208 for 1970; 0.851, 0.718, 0.472 and 0.251 for 1980; and 0.895, 0.777, 0.567 and 0.316 for 1990. The ISC averages per income category were: 0.812, 0.656, 0.605 and 0.501 for 1970; 0.815, 0.664, 0.608 and 0.492 for 1980; and 0.867, 0.695, 0.611 and 0.494 for 1990. The I-HDI averages per income category were: 0.808, 0.627, 0.495 and 0.354 for 1970; 0.833, 0.691, 0.540 and 0.372 for 1980; and 0.881, 0.736, 0.589 and 0.405 for 1990.

Proportionally, far more developing democracies surpassed their respective income thresholds. For example, 72% of all democratic states had above average I-HDI values in 1990, compared to only 36% of non-democratic (3-5*) states and 39% of non-democratic (6-7) states. The only partial exception to this rule was found for 1970: the gaps in HDI and I-HDI percentages were quite small between the democratic and non-democratic (3-5*) states, and a slightly higher percentage of non-democratic (3-5*) states had above average ISC values. Over the course of the entire period, approximately 75% of all democracies in the developing world exhibited above average HDI, ISC and I-HDI values, relative to their income levels, compared to roughly 40% of all non-democratic (3-5*) states and 35% of all non-democratic (6-7) states.

4.3 Levels of Democracy and Human Development By Region

The preceding evidence has shown that the relationship between democracy and human development is largely affected by the level of economic development, but that, even when controls are made for national affluence, democratic states still tend to display higher human development values. When explored on a regional basis, in the absence of controls for economic development, this relationship is severely weakened: insofar as the developing world is concerned, democratic states are not invariably the most developed.

In the analysis to follow, the 88 developing countries in my sample have been divided into four regional groups: Asia (ASI, N=16), South and Central America (hereinafter referred to as Latin America, LAT, N=23), the Middle East and North Africa (MID, N=13), and sub-Saharan Africa (AFR, N=36).[12] After initially assessing the general patterns across regions, the specific trends within each region will be addressed in turn.

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[12]The countries belonging to each regional group are given below:

ASI (N=16): Singapore, Hong Kong, South Korea, Sri Lanka, Philippines, Malaysia, Thailand, China, Papua New Guinea, Myanmar, Indonesia, India, Pakistan, Bangladesh, Nepal, Afghanistan.

LAT (N=23): Barbados, Trinidad and Tobago, Uruguay, Argentina, Venezuela, Chile, Jamaica, Costa Rica, Mexico, Panama, Cuba, Colombia, Peru, Paraguay, Brazil, Ecuador, Nicaragua, Dominican Republic, El Salvador, Guatemala, Bolivia, Honduras, Haiti.

MID (N=13): Kuwait, UAE, Saudi Arabia, Iraq, Turkey, Syria, Iran, Jordan, Libya, Tunisia, Algeria, Morocco, Egypt.

AFR (N=36): Mauritius, South Africa, Gabon, Zimbabwe, Zambia, Congo, Lesotho, Madagascar, Botswana, Ghana, Kenya, Cameroon, Mozambique, Ivory Coast, Zaire, Nigeria, Liberia, Rwanda, Uganda, Tanzania, Central African Republic, Angola, Sudan, Togo, Malawi, Senegal, Benin, Burundi, Sierra Leone, Chad, Niger, Somalia, Burkina Faso, Guinea, Gambia, Mali.

Overview of Regional Variations

The tendency to view democracy as a culturally-specific (i.e., 'Western') political prescription which is, by definition, alien to the indigenous political cultures of the developing world was touched upon in Chapter 2. Whether or not one agrees with this view, and leaving the philosophical issues aside, it is certainly true that democracies are a rarity in the developing regions. There were only fourteen developing democracies in 1970 and 1980, and twenty-five in 1990; figures which translate into 16% and 28% of the total sample.[13] Furthermore, as shown in Figure 4.8 (graph a), the democratic states were mostly concentrated in one region: between one-half (1970) and two-thirds (1990) were in Latin America. Democratic governance was virtually unheard of in the MID and AFR regions.

The number of democratic states in Asia remained fairly constant throughout the period: four in both 1970 and 1980, five in 1990 (representing about one-quarter of the regional total). Most Asian countries had LoD values in 3-5* range. The largest regional change occurred in Latin America, where the number of democracies doubled from eight in 1970 to sixteen in 1990 (or from around 35% to 70% of the total). There was very little movement in the MID region during the period, with Turkey being the solitary (somewhat) democratic representative. In sub-Saharan Africa, democratic LoD values were found for only Gambia (all three dates), Mauritius (1980 and 1990) and Botswana (1990). This region remained solidly authoritarian (about 70% of the countries had LoD values of 6-7), and accounted for 56-63% of all strongly authoritarian states in the developing world.

Looking at the second part of the relationship (graph b), another generalization may be forwarded: there were preciously few developing states with high human development values. Only Barbados had reached the High I-HDI Level (0.800+) by 1970, to be joined by Trinidad and Tobago and Hong Kong in 1980. Four other states - Chile, Costa Rica, South Korea and Singapore - had attained this status by 1990, bringing the total number of High I-HDI countries to seven (or 8% of the developing sample). In contrast, there were 54 developing states (61% of the total) with Low I-HDI values in 1970, declining to 26 states (or 30%) by 1990. A disproportionately large number of these states were found in sub-Saharan Africa: this region provided between 63% (1970) and 81% (1990) of all states with I-HDI values of 0.499 or less. In effect, then, by 1990 most ASI and LAT states were at the Medium Level, as were all thirteen MID states, while the vast majority of AFR states remained at the Low Level.

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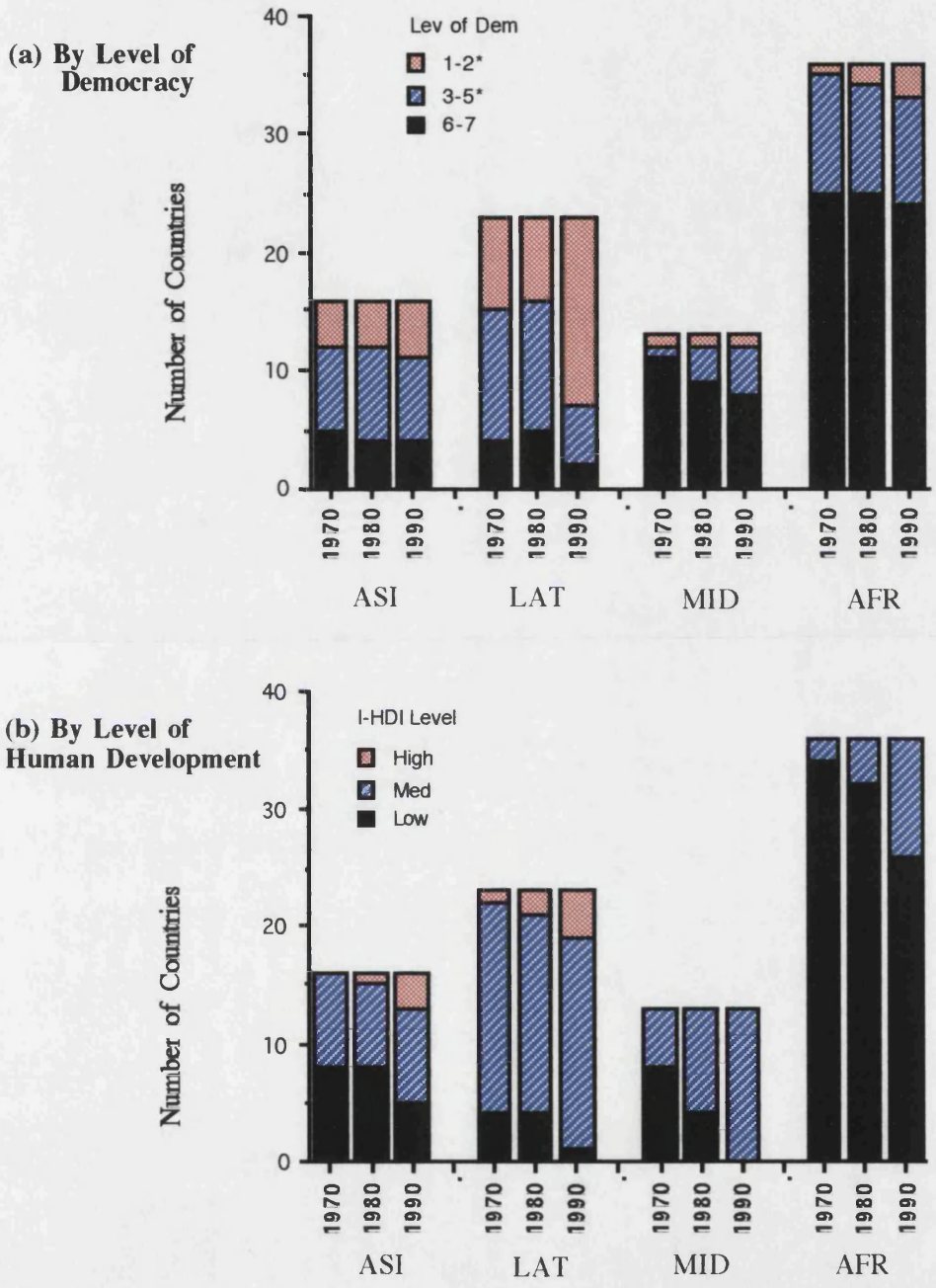
[13]The developing democracies (LoD 1.0-2.9) were: Barbados, Jamaica, Venezuela, Chile, Costa Rica, Trinidad and Tobago, Uruguay, Sri Lanka, Malaysia, Bangladesh (after independence), Gambia, India, Colombia and Turkey in 1970; Barbados, Venezuela, Costa Rica, Sri Lanka, India, Trinidad and Tobago, Jamaica, Colombia, the Dominican Republic, Gambia, Papua New Guinea, Mauritius, Malaysia and Turkey in 1980; Barbados, Venezuela, Costa Rica, Trinidad and Tobago, Argentina, Uruguay, South Korea, Mauritius, Botswana, Brazil, Mexico, Dominican Republic, India, Bolivia, Ecuador, Honduras, Jamaica, Papua New Guinea, Turkey, Peru, the Philippines, Colombia, Sri Lanka, El Salvador, and Gambia in 1990.

Fig. 4.8 Regional Distribution of Countries By Level of Democracy and Human Development



Given these general, region-wide observations, does the democracy-development relationship still hold? In other words, do democracies consistently display the highest human development values in every region? Despite the uneven distribution of countries by LoD group in the MID and AFR regions, and the accompanying doubts about the representativeness of single- or few- country cases, these questions are still worth posing.

Table 4.10 gives a detailed breakdown of the average index values produced by each level of democracy. Cases where the democratic states displayed the highest index average appear in italics. They produced the highest HDI average in only one (LAT) of the four regions in 1970, in two regions (LAT and AFR) in 1980, and in three regions (excluding ASI) in 1990. Democratic states produced the highest ISC average in two regions (LAT and AFR) in both 1970 and 1990, and in three regions in 1980 (excluding MID). Democratic states produced the highest I-HDI average in only one region (LAT) in 1970, in three regions in 1980 (excluding MID), and in two regions (LAT and AFR) in 1990. Across the four regions, democratic states had the highest HDI and I-HDI averages in exactly half of the comparative cases (12 of 24), and the highest ISC average in 7 of the 12 cases.

Table 4.10 Average Human Development Values By Level of Democracy, Regional Breakdown

		1970			1980			1990		
		Level of Democracy			Level of Democracy			Level of Democracy		
Index	Region	1-2*	3-5*	6-7	1-2*	3-5*	6-7	1-2*	3-5*	6-7
HDI	ASI	0.358	0.447	0.325	0.471	0.497	0.384	0.587	0.613	0.461
	LAT	*0.706*	0.512	0.409	*0.722*	0.605	0.600	*0.740*	0.698	0.510
	MID	0.441	0.684	0.401	0.549	0.487	0.593	*0.739*	0.636	0.682
	AFR	0.107	0.287	0.215	*0.387*	0.328	0.258	*0.554*	0.398	0.299
ISC	ASI	0.570	0.617	0.482	*0.658*	0.602	0.447	0.664	0.688	0.478
	LAT	*0.750*	0.642	0.638	*0.762*	0.611	0.586	*0.685*	0.629	0.685
	MID	0.592	0.772	0.538	0.513	0.629	0.549	0.491	0.618	0.628
	AFR	*0.655*	0.597	0.503	*0.667*	0.580	0.486	*0.730*	0.517	0.494
I-HDI	ASI	0.464	0.532	0.403	*0.565*	0.549	0.415	0.626	0.651	0.469
	LAT	*0.728*	0.577	0.523	*0.742*	0.608	0.593	*0.713*	0.664	0.598
	MID	0.516	0.728	0.469	0.531	0.558	0.571	0.615	0.627	0.655
	AFR	0.381	0.442	0.359	*0.527*	0.454	0.372	*0.642*	0.458	0.397

These results are still impressive, though not entirely conclusive given the variations and the distributional imbalances in some regional samples. The Asian democracies did not display the highest HDI average for any date, and displayed the highest ISC and I-HDI averages for only 1980.[14] In sharp contrast, the Latin American democracies posted the highest HDI, ISC and I-HDI averages for all three dates. Only once did the sole democracy

[14]Japan's omission from the calculations, given its status as an industrialized or developed state, is noteworthy. If one were to factor in Japan's extremely high 1990 index values - 0.929 for the HDI, 0.938 for the ISC, 0.934 for the I-HDI - the democratic group's averages would have increased to 0.644 (HDI), 0.710 (ISC) and 0.677 (I-HDI), giving this group the highest average rates in the region (though, it should be said, by not much).

in the MID region, Turkey, produce a higher index value than the averages for the non-democratic (3-5*) and non-democratic (6-7) states (the HDI in 1990). The only African state to statistically qualify as a democracy in 1970, Gambia, exhibited an ISC value which was higher than the averages for the non-democratic groups (although its HDI value was very dismal); with Mauritius (1980) and Botswana (1990) also exhibiting democratic LoD scores, the African democracies produced the highest HDI, ISC, and I-HDI averages for 1980 and 1990. It is not, therefore, strictly accurate to say that the democracy-development relationship remained strong *across* regions, for only in Latin America were the most democratic states undoubtedly the most developed over the course of the 1970-90 period.

Blurring regional distinctions for the moment, it is also worth noting just how many states from each level of democracy produced human development values above their respective regional 'thresholds' (averages). The results, computed as a percentage of each LoD group, are presented in Table 4.11.

Table 4.11 Percentage of 'Above Average' Developing States By Level of Democracy, Regional Threshold (1970-90)

LoD	HDI 1970	1980	1990	ISC 1970	1980	1990	I-HDI 1970	1980	1990
1-2*	71%	64	68	71	78	60	79	64	60
3-5*	48	48	48	64	68	64	52	52	52
6-7	31	40	37	49	40	45	31	40	45

Note. The average HDI values for each region (ASI, LAT, MID, AFR) were: 0.386, 0.561, 0.426 and 0.232 for 1970; 0.462, 0.639, 0.565 and 0.283 for 1980; and 0.567, 0.711, 0.673 and 0.345 for 1990. The ISC averages per region were: 0.563, 0.679, 0.560 and 0.533 for 1970; 0.577, 0.651, 0.565 and 0.520 for 1980; and 0.628, 0.673, 0.614 and 0.520 for 1990. The I-HDI averages per region were: 0.475, 0.620, 0.493 and 0.383 for 1970; 0.520, 0.645, 0.565 and 0.401 for 1980; and 0.598, 0.692, 0.643 and 0.432 for 1990.

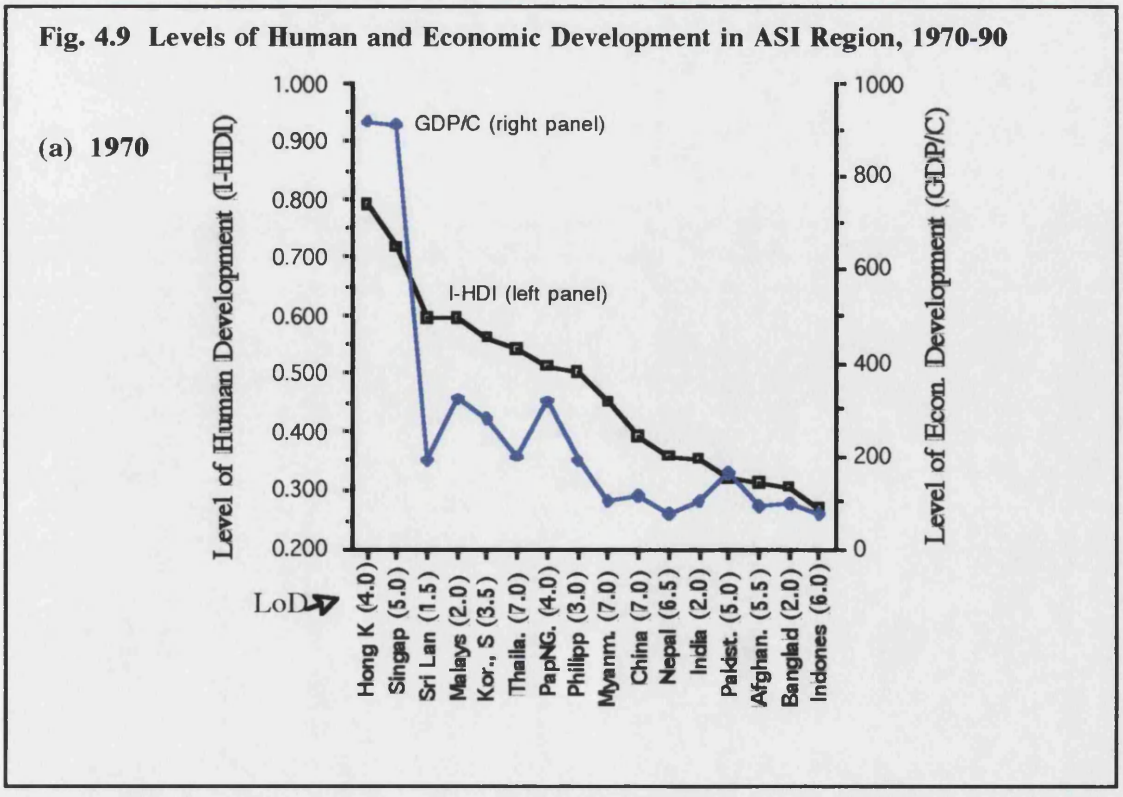
Save for one case (ISC 1990), far more democratic states, proportionally, surpassed their regional thresholds than did the two non-democratic groups of states. Roughly three-quarters of all developing democracies produced HDI, ISC and I-HDI values above their regional averages during this period, compared to around 48-68% of non-democratic (3-5*) states and only 31-49% of non-democratic (6-7) states. Once again, these results must be qualified. Given the preponderance of Latin American states among the developing democracies, one might claim that these results simply confirm that *Latin American* democracies tended to display higher index values than their regional (LAT) averages. The extent to which this is the case will soon become apparent.

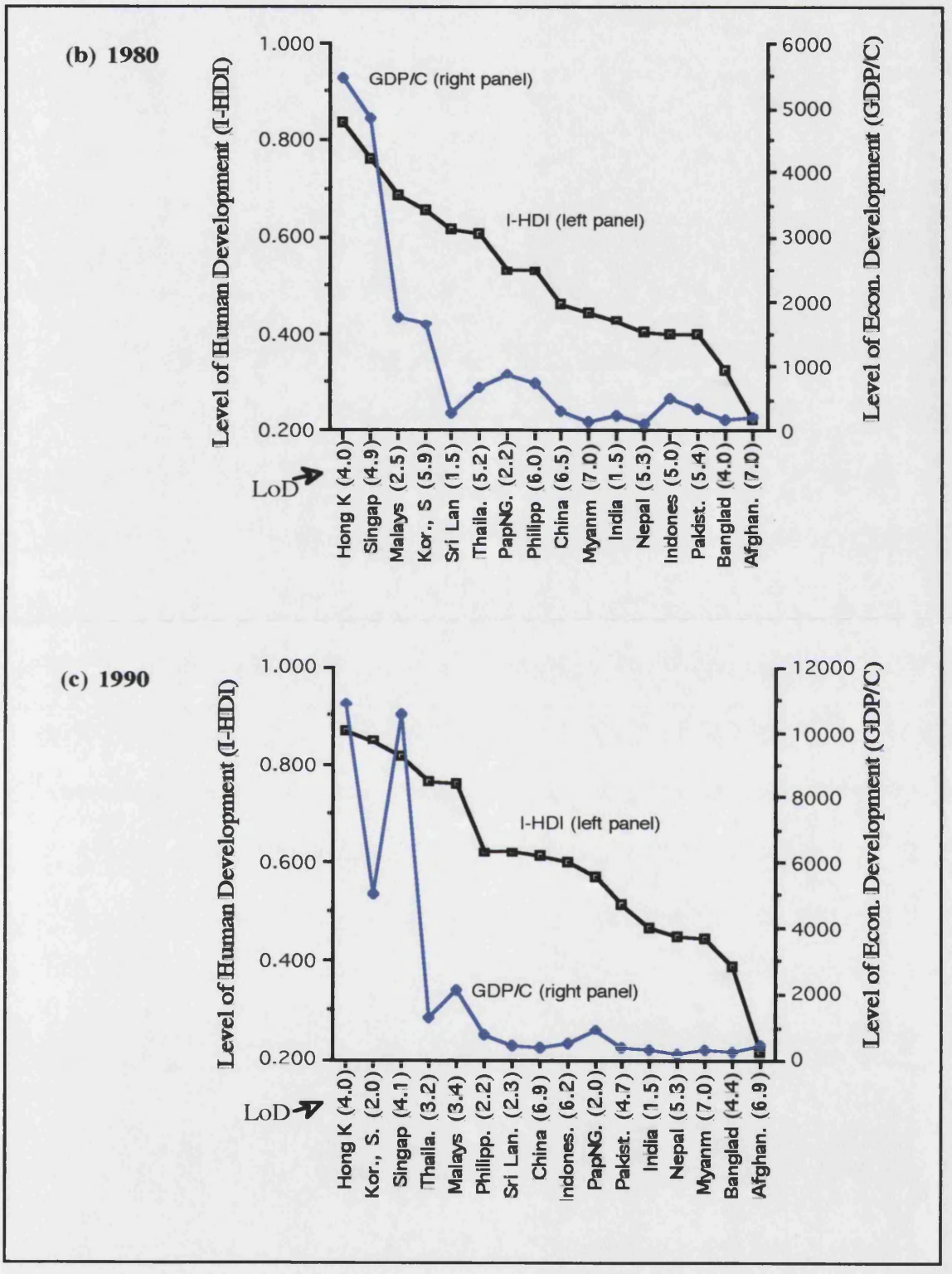
Levels of Democracy and Human Development in Asia, 1970-90

Democratic rule was not the norm in the ASI region during the 1970-90 period, with the percentage of democracies hovering around 25% of the regional sample. Only India and Sri Lanka enjoyed any semblance of a democratic tradition and, as will be demonstrated shortly, their respective human development records varied dramatically. Relatively developed Malaysia displayed somewhat questionable democratic credentials in 1970 and 1980, and fell outside the democratic group altogether by 1990 (LoD of 3.4). Bangladesh's inclusion in the democratic camp was short lived (only c1970), Papua New Guinea qualified in 1980 and 1990, and, following the overthrow of their respective dictatorships, South Korea and the Philippines had become democratic by 1990.

Precisely how the democratic states fared can be seen in Figure 4.9, where a double-Y axis format is employed to show the triangular relationship between levels of democracy (LoD values are given for each state), and levels of human development (left hand panel) and economic development (right hand panel). This format provides a snapshot of how closely human development values mirror levels of economic development (GDP/C rates), the distribution of LoD values along the scales of human development and economic development, and how democratic states compare in terms of human development against non-democratic states of similar economic means. The countries are arranged left to right by descending human development (I-HDI) scores.

Fig. 4.9 Levels of Human and Economic Development in ASI Region, 1970-90




(b) 1980
Level of Human Development (I-HDI)
1.000
0.800
0.600
0.400
0.200
GDP/C (right panel)
I-HDI (left panel)
6000
5000
4000
3000
2000
1000
0
Level of Econ. Development (GDP/C)
LoD
Hong K (4.0)
Singap (4.9)
Malays (2.5)
Kor., S (5.9)
Sri Lan (1.5)
Thaila. (5.2)
PapNG. (2.2)
Philipp (6.0)
China (6.5)
Myanm (7.0)
India (1.5)
Nepal (5.3)
Indones (5.0)
Pakist. (5.4)
Banglad (4.0)
Afghan. (7.0)
(c) 1990
Level of Human Development (I-HDI)
1.000
0.800
0.600
0.400
0.200
I-HDI (left panel)
GDP/C (right panel)
12000
10000
8000
6000
4000
2000
0
Level of Econ. Development (GDP/C)
LoD
Hong K (4.0)
Kor., S. (2.0)
Singap (4.1)
Thaila. (3.2)
Malays (3.4)
Philipp. (2.2)
Sri Lan. (2.3)
China (6.9)
Indones. (6.2)
PapNG. (2.0)
Pakist. (4.7)
India (1.5)
Nepal (5.3)
Myanm (7.0)
Banglad (4.4)
Afghan. (6.9)

To a large extent, the lines depicting the range of human development values for all three dates broadly correspond to the lines representing the GDP/C values; in other words, the degree of national affluence appeared to influence human development ranks. The two wealthiest cases in 1970, Hong Kong ($916) and Singapore ($914), were also the most developed (I-HDI values of 0.791 and 0.717). The same may be observed for 1980: Hong Kong was the wealthiest ($5467) and most developed (0.836), followed by Singapore ($4852 and 0.765). This pattern remained broadly intact in 1990: the three wealthiest states were also the most developed; although, with almost half the GDP/C rate of Singapore, South Korea displayed a marginally higher I-HDI value.

At the other end of the two scales, the least developed states were also among the very poorest in the region. With a GDP/C of $79 in 1970 (above only Nepal at $75), Indonesia displayed the lowest I-HDI value (0.271). The least developed state in 1980 and 1990, Afghanistan (0.224 and 0.216), had GDP/C rates of $219 and $400. In general, however, the states found in the bottom half of the income scale largely fell within the same narrow range of GDP/C values, but tended to have widely varying I-HDI values. In 1990, for example, a vast gulf separated China (0.613) and Afghanistan (0.216) in terms of I-HDI scores, despite the almost identical GDP/C values ($381 and $400).

The handful of democratic states in this region were not clustered at any particular interval along the I-HDI scale. Sri Lanka and Malaysia were ranked third and fourth in terms of I-HDI values in 1970, whereas India and Bangladesh were ranked 12th and 15th. In 1980, Malaysia and Sri Lanka were found in the top part of the I-HDI scale, Papua New Guinea was near the middle, and India was in the bottom third. By 1990, newly-democratized South Korea was the second most developed state (after Hong Kong), the Philippines and Sri Lanka were located in the middle of the scale, Papua New Guinea was slightly further back, and India remained in the bottom third.

How the democratic states fared against non-democratic states of similar economic means varied to such an extent that generalizations are insupportable. In 1970, Sri Lanka and Malaysia compared favourably, India and Bangladesh did not. More specifically: Sri Lanka had virtually the same GDP/C ($190) as the Philippines ($187), but displayed a better I-HDI score (0.595, compared to 0.503); Malaysia had a higher I-HDI value (0.595) than Papua New Guinea (0.516) although their GDP/C rates were identical ($319 and $317); despite having similar GDP/C rates ($75-111), India had a lower I-HDI value (0.357) than Myanmar (0.455), China (0.390) and Nepal (0.360); Bangladesh too fell within this GDP/C range, but surpassed only Indonesia in I-HDI values (0.307 and 0.235). The patterns were less clear in 1980: Malaysia and South Korea had virtually indistinguishable GDP/C and I-HDI values; Sri Lanka compared very favourably against all the other states in its GDP/C range ($279); in the $650-900 GDP/C range, Papua New Guinea had a similar I-HDI value (0.532) as the Philippines (0.529), although its value was lower than Thailand's (0.607); among the very poorest states, India's I-HDI value (0.427) was lower than China's (0.463) and Myanmar's (0.445), but higher than the values for five

other states. The records of democratic states were mixed for 1990: since no other country fell within the GDP/C range of South Korea, comparisons here are moot; in the middle of the scale, the Philippines, Sri Lanka and Papua New Guinea had I-HDI values similar to China and Indonesia (0.613 and 0.602), despite being (with the exception of Sri Lanka) much wealthier than the two non-democratic states (the GDP/C rates were $728 for the Philippines, $405 for Sri Lanka, $926 for Papua New Guinea, $520 for Indonesia and $381 for China); of the seven states with GDP/C rates of $400 or less, India produced a better I-HDI value (0.467) than all but Pakistan (0.513) and China (0.613).

The exact breakdown of human development values (HDI, ISC and I-HDI) and GDP/C rates, arranged by level of democracy, is given in Table 4.12 (overleaf) for all three dates. Undoubtedly, the democratic group contained two successful states circa 1970, Sri Lanka and Malaysia, and two unsuccessful states, India and Bangladesh. The former two placed within the top seven regional ranks in terms of human development scores and GDP/C rates, whereas the latter two were to be found near the bottom of every measure. By 1980, the replacement for Bangladesh in the democratic group, Papua New Guinea, displayed an unimpressive HDI score but, owing to its comparably better ISC value, secured a relatively respectable I-HDI rank. Malaysia continued to exhibit good human development and GDP/C values, as did Sri Lanka (although it had slipped in the GDP/C rankings from 7th to 11th). India remained mired near the bottom ranks. Of the two recent converts to democracy by 1990, South Korea was ranked second for every human development measure and third for GDP/C, while the Philippines exhibited mediocre scores (middle ranks). Relative to their respective ranks in 1980, Sri Lanka and Papua New Guinea did not produce impressive results. India was ranked 13th for HDI, ISC and GDP/C values, and 12th for the I-HDI. Only two states remained democratic for all three dates, of which India consistently displayed sub-par scores while Sri Lanka, owing to its civil war, gradually descended into the middle ranks.

A primary advantage in listing the HDI and ISC results side by side is that one may observe precisely how a country's overall human development situation, as captured by the I-HDI, has been determined. For instance, a country with a high HDI rank but a low ISC rank may be deemed to have done a (relatively) good job at strengthening individual capabilities, but a poor job at fostering a free, secure, and equitable social environment. A high ISC rank coupled with a low HDI rank would indicate the opposite type of imbalance.

Table 4.12 Human Development Values By Level of Democracy, ASI Region

Year	Country	LoD	HDI	Rank	ISC	Rank	I-HDI	Rank	GDP/C	Rank
1970	Sri Lanka	1.5	0.506	4	0.685	5	0.595	3	190	7
	Malaysia	2.0	0.471	6	0.720	3	0.595	4	319	3
	India	2.0	0.254	12	0.460	12	0.357	12	104	12
	Bangladesh	2.0	0.199	14	0.415	13	0.307	15	97	13
	Philippines	3.0	0.489	5	0.517	10	0.503	8	187	8
	Korea, S.	3.5	0.523	3	0.602	7	0.563	5	279	5
	Hong Kong	4.0	0.737	1	0.845	1	0.791	1	916	1
	Papua NG	4.0	0.325	9	0.707	4	0.516	7	317	4
	Singapore	5.0	0.682	2	0.751	2	0.717	2	914	2
	Pakistan	5.0	0.244	13	0.401	15	0.322	13	162	9
	Afghanistan	5.5	0.131	16	0.496	11	0.313	14	93	14
	Indonesia	6.0	0.306	11	0.235	16	0.271	16	79	15
	Nepal	6.5	0.162	15	0.557	9	0.360	11	75	16
	Thailand	7.0	0.465	7	0.616	6	0.541	6	198	6
	China	7.0	0.372	8	0.408	14	0.390	10	111	10
	Myanmar	7.0	0.318	10	0.592	8	0.455	9	104	11
1980	Sri Lanka	1.5	0.552	6	0.677	5	0.615	5	279	11
	India	1.5	0.296	12	0.559	9	0.427	11	250	12
	Papua NG.	2.2	0.348	11	0.715	3	0.532	7	896	5
	Malaysia	2.5	0.687	3	0.682	4	0.684	3	1779	3
	Bangladesh	4.0	0.234	14	0.418	14	0.326	15	179	14
	Hong Kong	4.0	0.830	1	0.842	1	0.836	1	5467	1
	Singapore	4.9	0.780	2	0.749	2	0.765	2	4852	2
	Indonesia	5.0	0.418	9	0.385	15	0.401	13	517	8
	Thailand	5.2	0.551	7	0.663	6	0.607	6	688	7
	Nepal	5.3	0.209	15	0.603	8	0.406	12	131	16
	Pakistan	5.4	0.287	13	0.508	11	0.398	14	333	9
	Korea, S.	5.9	0.666	4	0.648	7	0.657	4	1643	4
	Philippines	6.0	0.557	5	0.501	12	0.529	8	729	6
	China	6.5	0.457	8	0.469	13	0.463	9	305	10
	Afghanistan	7.0	0.165	16	0.283	16	0.224	16	219	13
	Myanmar	7.0	0.356	10	0.535	10	0.445	10	165	15
1990	India	1.5	0.382	13	0.551	13	0.467	12	317	13
	Korea, S.	2.0	0.859	2	0.839	2	0.849	2	5030	3
	Papua NG.	2.0	0.408	10	0.738	4	0.573	10	926	6
	Philippines	2.2	0.621	8	0.620	8	0.621	6	728	7
	Sri Lanka	2.3	0.665	6	0.574	12	0.620	7	405	9
	Thailand	3.2	0.798	4	0.730	5	0.764	4	1269	5
	Malaysia	3.4	0.794	5	0.722	6	0.758	5	2149	4
	Hong Kong	4.0	0.875	1	0.863	1	0.869	1	10877	1
	Singapore	4.1	0.836	3	0.796	3	0.816	3	10539	2
	Bangladesh	4.4	0.309	14	0.465	15	0.387	15	218	15
	Pakistan	4.7	0.393	12	0.634	7	0.513	11	386	11
	Nepal	5.3	0.289	15	0.605	10	0.447	13	164	16
	Indonesia	6.2	0.586	9	0.617	9	0.602	9	520	8
	Afghanistan	6.9	0.208	16	0.225	16	0.216	16	400	10
	China	6.9	0.644	7	0.583	11	0.613	8	381	12
	Myanmar	7.0	0.406	11	0.487	14	0.446	14	303	14

For the most part, such 'imbalances' of either type were uncommon in this region during the period: high HDI ranks were usually accompanied by high ISC ranks, low HDI ranks were accompanied by low ISC ranks. There were two exceptions in 1970, five in 1980, and two in 1990. In regional terms, the Philippines produced a good HDI rank (5th) in 1970, followed by a mediocre ISC rank (10th), while China exhibited a much better HDI rank (8th) than its ISC rank (14th) might have otherwise suggested (although, in absolute terms, its HDI value of 0.372 was poor). The only democratic state in 1980 to show an imbalance of any magnitude was Papua New Guinea: ranked 11th for the HDI, it produced the 3rd best regional ISC value. Among the non-democratic (3-5*) states, Indonesia had the second worst ISC value in the region but a mediocre HDI rank (9th), while Nepal showed a mediocre ISC rank (8th) and the second worst HDI rank. In the non-democratic (6-7) group, China and the Philippines had virtually the same imbalances they had in 1970. In 1990, the only two states with HDI/ISC imbalances were democratic: Papua New Guinea continued to exhibit a poor HDI rank (10th) but a good ISC rank (4th), while Sri Lanka had a good HDI rank (6th) but a poor ISC rank (12th); Sri Lanka's civil war forced its ISC rank down (from 5th in both 1970 and 1980).

Another type of 'imbalance' to be observed in the table is between a country's overall human development (I-HDI) rank and its economic development (GDP/C) rank. As suggested by Figure 4.9, regardless of date, the states with the highest GDP/C ranks almost invariably had the highest index ranks; and by the same token, the states with the lowest GDP/C ranks tended have lower index ranks. There were virtually no cases where a country had a GDP/C rank in the bottom half of the income scale (R9-R16), but index ranks consistently in the top half of the human development scale (R1-8) - or vice versa. Only two such cases can be found in the table: Sri Lanka was ranked 11th in terms of GDP/C in 1980, but 6th for the HDI, 5th for the ISC and 5th for the I-HDI; Papua New Guinea was ranked 6th in terms of GDP/C in 1990, but only 10th for the HDI, 4th for the ISC and 10th for the I-HDI. By and large, the wealthiest states were the most developed, the poorest states were the least developed.

Table 4.13 below portrays the human development picture in a different light by showing how each Asian state fared against the three independent thresholds employed in this chapter. This method allows one to evaluate how states compared against: (1) the average for all developing states; (2) the average for all developing states at similar levels of economic development; and (3) the average for all states in the ASI region. A positive sign (+) indicates that a country's human development value was above the given threshold standard for that date. Countries are listed by LoD group.

Table 4.13 Evaluating Levels of Human Development Against Threshold Standards, ASI Region

Year	Country	LoD	Developing Avg.			Income Avg.			Regional Avg.		
			HDI	ISC	I-HDI	HDI	ISC	I-HDI	HDI	ISC	I-HDI
1970	Sri Lanka	1.5	+	+	+	+	+	+	+	+	+
	Bangladesh	2.0	-	-	-	-	-	-	-	-	-
	India	2.0	-	-	-	+	-	+	-	-	-
	Malaysia	2.0	+	+	+	+	+	+	+	+	+
	Philippines	3.0	+	-	+	+	-	+	+	-	+
	Korea, S.	3.5	+	+	+	+	-	+	+	+	+
	Hong Kong	4.0	+	+	+	+	+	+	+	+	+
	Papua NG.	4.0	-	+	+	-	+	+	-	+	+
	Pakistan	5.0	-	-	-	+	-	-	-	-	-
	Singapore	5.0	+	+	+	+	+	+	+	+	+
	Afghanistan	5.5	-	-	-	-	-	-	-	-	-
	Indonesia	6.0	-	-	-	+	-	-	-	-	-
	Nepal	6.5	-	-	-	-	+	+	-	+	-
	China	7.0	-	-	-	+	-	+	-	-	-
	Myanmar	7.0	-	+	-	+	+	+	-	+	-
	Thailand	7.0	+	+	+	+	+	+	+	+	+
1980	India	1.5	-	-	-	+	+	+	-	-	-
	Sri Lanka	1.5	+	+	+	+	+	+	+	+	+
	Papua NG.	2.2	-	+	+	-	+	-	-	+	+
	Malaysia	2.5	+	+	+	-	+	-	+	+	+
	Bangladesh	4.0	-	-	-	-	-	-	-	-	-
	Hong Kong	4.0	+	+	+	-	+	+	+	+	+
	Singapore	4.9	+	+	+	+	+	+	+	+	+
	Indonesia	5.0	-	-	-	-	-	-	-	-	-
	Thailand	5.2	+	+	+	+	+	+	+	+	+
	Nepal	5.3	-	+	-	-	+	+	-	+	-
	Pakistan	5.4	-	-	-	+	+	+	-	-	-
	Korea, S.	5.9	+	+	+	-	-	-	+	+	+
	Philippines	6.0	+	-	+	+	-	-	+	-	+
	China	6.5	+	-	-	+	-	+	-	-	-
	Afghanistan	7.0	-	-	-	-	-	-	-	-	-
	Myanmar	7.0	-	-	-	+	+	+	-	-	-
1990	India	1.5	-	-	-	+	+	+	-	-	-
	Korea, S.	2.0	+	+	+	+	+	+	+	+	+
	Papua NG.	2.0	-	+	+	-	+	-	-	+	-
	Philippines	2.2	+	+	+	+	+	+	+	-	+
	Sri Lanka	2.3	+	-	+	+	+	+	+	-	+
	Thailand	3.2	+	+	+	+	+	+	+	+	+
	Malaysia	3.4	+	+	+	+	+	+	+	+	+
	Hong Kong	4.0	+	+	+	-	-	-	+	+	+
	Singapore	4.1	+	+	+	-	-	-	+	+	+
	Bangladesh	4.4	-	-	-	-	-	-	-	-	-
	Pakistan	4.7	-	+	-	+	+	+	-	+	-
	Nepal	5.3	-	+	-	-	+	+	-	-	-
	Indonesia	6.2	+	+	+	+	+	+	+	-	+
	Afghanistan	6.9	-	-	-	-	-	-	-	-	-
	China	6.9	+	-	+	+	+	+	+	-	+
	Myanmar	7.0	-	-	-	+	-	+	-	-	-

Notes. The actual 1970-90 averages were given in Tables 4.4 (Dev), 4.9 (Inc), 4.11 (Reg).
(+) above threshold average, (-) below threshold average.

The records of democratic states circa 1970 could not be any different: Sri Lanka and Malaysia surpassed every threshold for all indices, Bangladesh failed to surpass any threshold, and India could only surpass its HDI and I-HDI income thresholds (not surprisingly, given that India fell within the same income category, INC 4, as the poorest states in sub-Saharan Africa). In the non-democratic (3-5*) group, Hong Kong and Singapore surpassed every threshold, whereas South Korea surpassed all but one (the ISC average for its income category). The Philippines fared well against the various HDI and I-HDI thresholds (but not the ISC thresholds), Papua New Guinea fared well against the ISC and I-HDI thresholds (but not the HDI thresholds), and both Pakistan and Afghanistan fared very poorly across the thresholds. The only exceptional record among the non-democratic (6-7) states belonged to Thailand, which surpassed every threshold for all three indices. The records of Indonesia, Nepal, China, and Myanmar were generally poor; with the exception of Indonesia, all fared better against their income thresholds.

Of the four democratic states in 1980, only Sri Lanka exceeded every threshold for all three indices. Malaysia displayed a strong record against the developing and regional averages, but failed to cross its respective HDI and I-HDI income thresholds. Once again, India only compared favourably against its income thresholds (INC 4). The newest entrant to the democratic camp, Papua New Guinea, posted below average HDI values (although its ISC values were above average). Singapore and Thailand were the only non-democratic (3-5*) states with above average values across all thresholds. Hong Kong failed to surpass only its income threshold for the HDI, largely due to its INC 1 status (i.e., it was evaluated against the average for most of the OECD countries). South Korea, too, managed to surpass the developing and regional thresholds, but not the income thresholds (it was evaluated against the averages produced by the INC 2 countries). Pakistan and Nepal exhibited poor records, managing to surpass very few thresholds, while Bangladesh and Indonesia failed to surpass any threshold. None of the non-democratic (6-7) states displayed particularly good records, although the Philippines compared well against the HDI and I-HDI thresholds. China had a respectable record against the HDI thresholds only (although it did not surpass the regional HDI average), Myanmar managed to display above average values against only the income thresholds (INC 4 category), and Afghanistan failed to surpass any threshold.

With the exception of India, which compared favourably against only its income thresholds (still INC 4), the democratic states posted strong records in 1990. South Korea had above average values across all thresholds, the Philippines failed only to surpass the regional ISC average, and Sri Lanka failed to surpass only the developing and regional ISC averages (due to its lower Security Index value, reflecting its civil war). The remaining democracy, Papua New Guinea, continued to display above average ISC values but below average HDI and I-HDI values. The exceptional records among the non-democratic (3-5*) states belonged to Thailand and Malaysia, which managed to exceed all thresholds, and to Hong Kong and Singapore, both of which exceeded all developing and regional thresholds but no income thresholds (given their INC 1 status, they were evaluated against the averages

for the largely OECD states). Pakistan and Nepal did not produce good records, and Bangladesh once again failed to surpass any threshold. Among the non-democratic (6-7) states, Indonesia and China both showed vastly improved records. Indonesia succeeded in surpassing all but the regional ISC average, while China surpassed all but the developing and regional ISC averages. Myanmar and Afghanistan displayed dismal records.

In light of the above evidence, no generalizations are warranted regarding democracy and human development in Asia. Every level of democracy spawned its share of states with good and poor human development records. It would perhaps be more accurate to suggest that the level of economic development had a stronger impact on the placement of states along the continuum of human development values. In turn, levels of economic development were not in any way associated with levels of democracy: there were (relatively) wealthy and poor states within each LoD group.

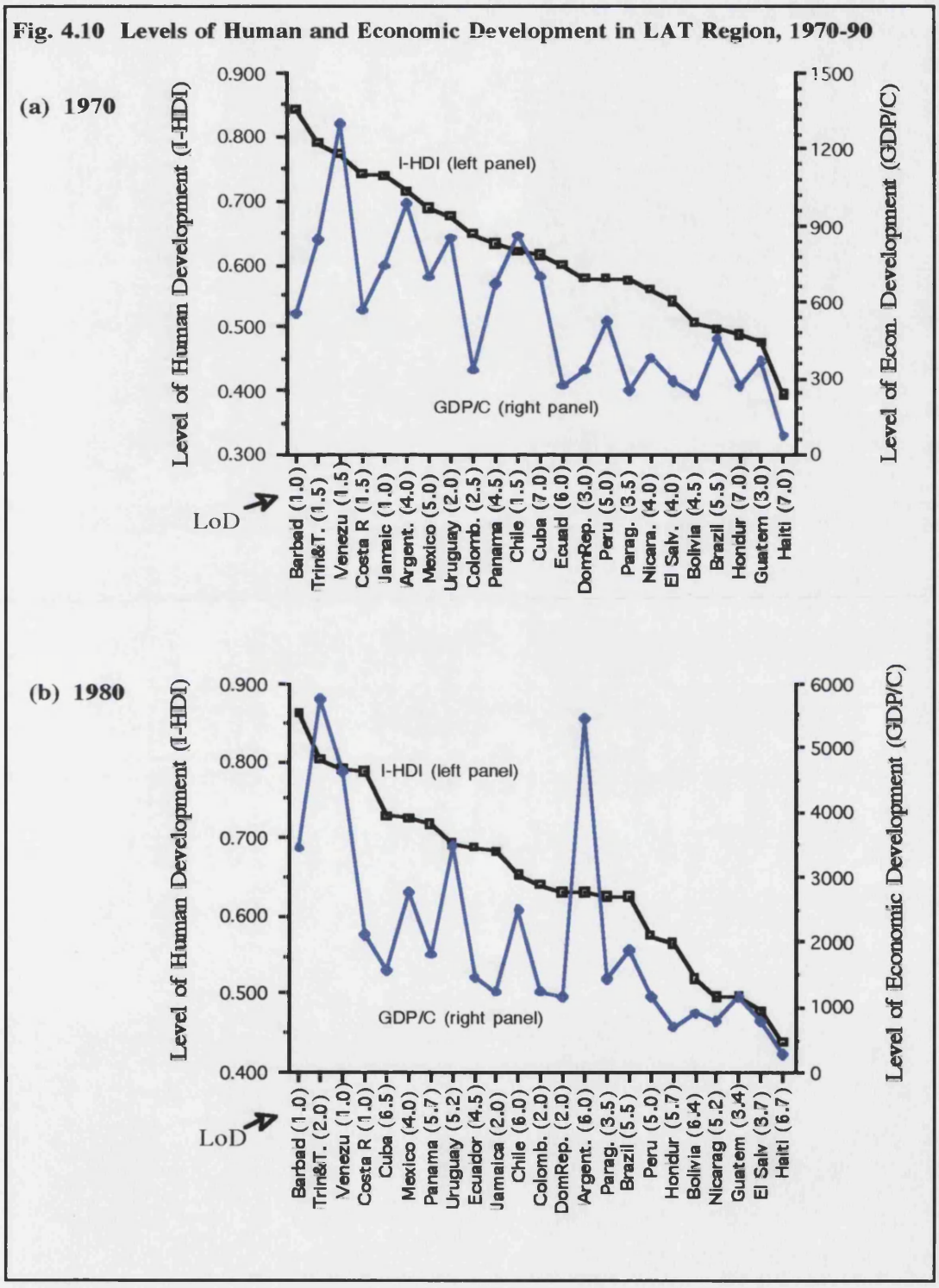
Levels of Democracy and Human Development in Latin America, 1970-90

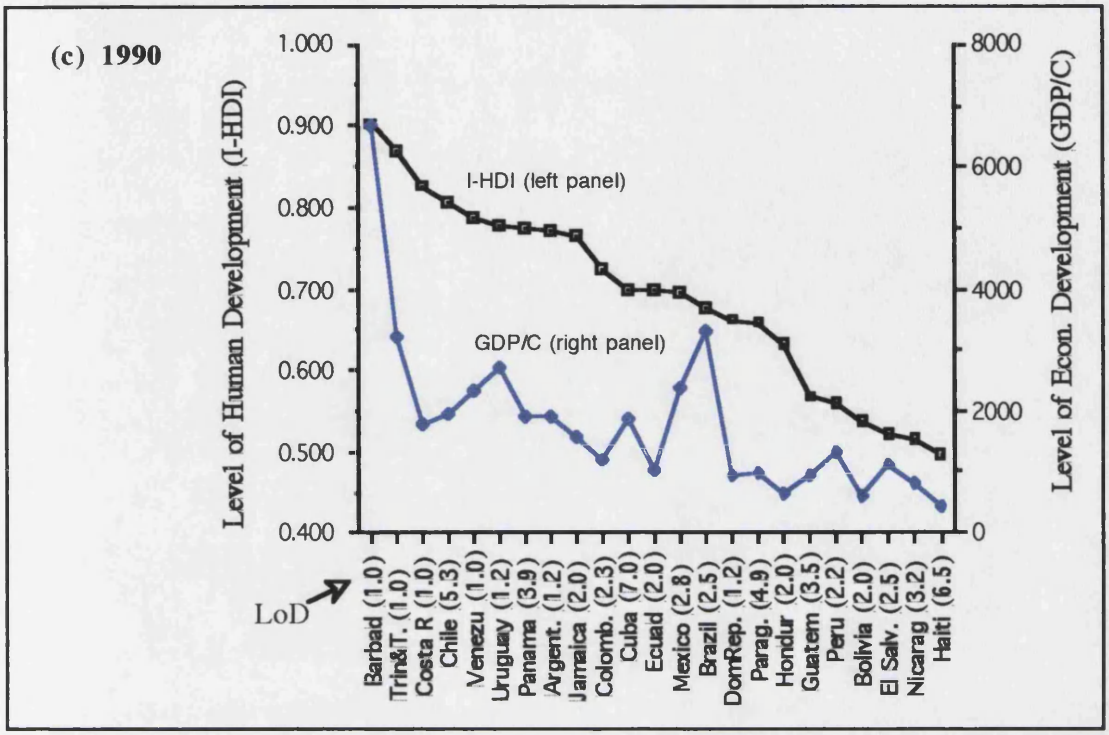
As previously acknowledged, the majority of democratic states in the developing world were concentrated in Latin America (LAT).[15] Consequently, the LAT region exerted a disproportionate influence on the cross-regional evaluations of democracy and development. Six states remained democratic throughout the entire period: Barbados, Trinidad and Tobago, Venezuela, Costa Rica, Jamaica and Colombia. Chile had a democratic LoD value in 1970 only. Uruguay displayed democratic credentials in 1970 and 1990, but not in 1980. The Dominican Republic posted democratic LoD values in 1980 and 1990, while Argentina, Ecuador, Mexico (loosely), Brazil, Honduras, Peru, Bolivia and El Salvador had joined the democratic camp by 1990. There were eight democracies in 1970, seven in 1980, and sixteen in 1990. The percentage of democracies thus increased from around one-third the regional total (23 LAT states) in 1970 and 1980 to just under three-quarters by 1990.

Figure 4.10 depicts the levels of human and economic development in Latin America for the 1970-90 period. The LoD value for each country is provided, and countries are listed from left to right by decreasing I-HDI values. It takes just a brief glance at the graphs to conclude that, unlike the patterns found for the ASI region, the lines portraying the I-HDI and GDP/C values did not generally move in tandem; in other words, a country's human development value was not necessarily influenced by its relative level of economic development. For example, the most developed state in 1970, Barbados, actually had the

[15] This designation is a term of convenience which is used for geographic rather than cultural purposes, and therefore also includes non-Spanish speaking states in Central and South America (Barbados, Jamaica, etc).

Fig. 4.10 Levels of Human and Economic Development in LAT Region, 1970-90





11th highest GDP/C rate ($553), while the second most developed state, Trinidad and Tobago, was ranked fifth ($847). Chile was found near the middle of the I-HDI scale (11th) and yet had the third highest GDP/C ($858). Such apparent inconsistencies were readily observed for the other dates as well: Argentina and Brazil exhibited the second highest GDP/C rates in 1980 and 1990, respectively, but each country was ranked only 14th in terms of I-HDI values for each date. Despite the lack of any clear patterns, however, one may still draw a rough line down the middle of the scale and observe that, save for the odd exception, the wealthier states tended to fall within the top half of the human development scale, while the poorer states tended to be located in the bottom half. Consequently, the significance of economic development should not be dismissed altogether, although its impact was less visible in this region.

To a rather extraordinary extent, the Latin American democracies were clustered along the top of the human development scale. The five most developed states in 1970 were democratic (Barbados, Trinidad and Tobago, Venezuela, Costa Rica and Jamaica); the three other democratic states (Uruguay, Colombia and Chile) were all located in the upper-middle part of the scale. This situation had changed only slightly by 1980: the four most developed states were democratic (the four from 1970 minus Jamaica, which had slipped to the middle of the scale, just slightly ahead of the two other democracies, Colombia and the Dominican Republic). The wave of democratization which had swept the region by 1990 ensured that democratic states were to be found at every human development interval: eight of the ten most developed states were democratic, as were three of the five least developed states.

On the whole, democratic states tended to display higher I-HDI values than non-democratic states with similar or higher GDP/C rates. Non-democratic Argentina was the second wealthiest country in the region in 1970 (after Venezuela), but showed a lower I-HDI value (0.715) than the five more developed, democratic states; Barbados had just over half of Argentina's GDP/C but was considerably more developed (0.841). Panama had a slightly higher GDP/C rate ($667) than Costa Rica ($569), but possessed a much lower I-HDI score (0.632, compared to 0.742 for Costa Rica). Although Jamaica ($748), Mexico ($704) and Cuba ($701) had similar GDP/C rates, the latter two states had much lower I-HDI values (0.687 and 0.613, respectively, compared to 0.739 for Jamaica). Peru ($529) and Brazil ($454) both had higher GDP/C rates than Colombia ($337), but lower I-HDI values. The comparison which stands out most starkly in 1980 involves the region's two wealthiest states, Venezuela ($4644) and Argentina ($5462): whereas Venezuela was ranked third for I-HDI values (0.789), Argentina was ranked 14th (0.629). Moreover, although Costa Rica and Brazil had similar GDP/C rates ($2114 and $1877), Costa Rica was ranked 4th in terms of I-HDI values (0.786) while Brazil was ranked only 16th (0.625). One may also compare the records of two democratic states, Jamaica ($1250) and the Dominican Republic ($1164), against those of two non-democratic states with similar GDP/C rates, Peru ($1161) and Guatemala ($1139): the two democracies scored much better in terms of the I-HDI (0.684 and 0.630, against 0.575 and 0.495). Given the large number of recent converts to democratic rule by 1990, such comparisons between the LoD groups are largely insignificant for this date.

The breakdown of human development values and GDP/C rates by level of democracy is presented in Table 4.14. The top five HDI, ISC and I-HDI ranks in 1970 were held by democratic states. Moreover, all eight democratic states had I-HDI ranks in the top half of the I-HDI scale, with the lowest rank belonging to Chile (11th). The picture changed slightly by 1980, when a clearer distinction emerged between democracies with very good records (Barbados, Venezuela, Trinidad and Tobago, Costa Rica) and those with modest records (Jamaica, Colombia and the Dominican Republic); the former group had top five I-HDI ranks, whereas the latter group had I-HDI ranks of 10th, 12th and 13th. The only two non-democratic states with consistently decent (top 10) index ranks for this date were Cuba (9th for the HDI, 7th for the ISC, 5th for the I-HDI) and Panama (10th for the HDI, 6th for the ISC and 7th for the I-HDI). Judging by their index ranks in 1990, four of the sixteen democratic states displayed 'very good' human development records (Barbados, Trinidad and Tobago, Venezuela, Costa Rica), two had 'good' records (Uruguay and Argentina), five had 'modest' records (Jamaica, Ecuador, Colombia, Brazil and Mexico), and five had 'poor' records (the Dominican Republic, Honduras, Bolivia, Peru, and El Salvador). To place these assessments into further context: of those nine states returning to democratic rule, two had 'good' human development records, three had 'modest' records, and four had 'poor' records. The two non-democratic states with respectable human development ranks

Table 4.14 Human Development Values By Level of Democracy, LAT Region

Year	Country	LoD	HDI	R	ISC	R	I-HDI	R	GDP/C	R
1970	Jamaica	1.0	0.662	7	0.816	4	0.739	5	748	6
	Barbados	1.0	0.824	1	0.857	1	0.841	1	553	11
	Venezuela	1.5	0.728	5	0.817	3	0.773	3	1299	1
	Chile	1.5	0.682	6	0.560	22	0.621	11	858	3
	Trinidad & T.	1.5	0.789	2	0.789	5	0.789	2	847	5
	Costa Rica	1.5	0.647	8	0.837	2	0.742	4	569	10
	Uruguay	2.0	0.762	3	0.585	19	0.674	8	856	4
	Colombia	2.5	0.554	12	0.737	6	0.646	9	337	16
	Guatemala	3.0	0.392	20	0.564	21	0.478	22	363	15
	Dominican R.	3.0	0.455	18	0.702	9	0.578	14	336	17
	Paraguay	3.5	0.511	14	0.636	16	0.573	16	253	21
	Argentina	4.0	0.748	4	0.681	10	0.715	6	991	2
	Nicaragua	4.0	0.462	17	0.653	13	0.558	17	378	14
	El Salvador	4.0	0.422	19	0.661	12	0.541	18	287	18
	Panama	4.5	0.592	10	0.671	11	0.632	10	667	9
	Bolivia	4.5	0.369	21	0.644	14	0.507	19	234	22
	Mexico	5.0	0.642	9	0.732	7	0.687	7	704	7
	Peru	5.0	0.528	13	0.623	18	0.576	15	529	12
	Brazil	5.5	0.507	15	0.490	23	0.499	20	454	13
	Ecuador	6.0	0.485	16	0.709	8	0.597	13	277	19
	Cuba	7.0	0.582	11	0.644	15	0.613	12	701	8
	Honduras	7.0	0.350	22	0.629	17	0.489	21	263	20
	Haiti	7.0	0.218	23	0.571	20	0.394	23	73	23
1980	Venezuela	1.0	0.784	5	0.794	3	0.789	3	4644	3
	Barbados	1.0	0.856	1	0.868	1	0.862	1	3442	5
	Costa Rica	1.0	0.746	8	0.826	2	0.786	4	2114	8
	Trinidad & T.	2.0	0.816	3	0.788	4	0.802	2	5763	1
	Jamaica	2.0	0.654	13	0.714	9	0.684	10	1250	14
	Colombia	2.0	0.656	12	0.627	13	0.641	12	1241	15
	Dominican R.	2.0	0.541	17	0.718	8	0.630	13	1164	16
	Guatemala	3.4	0.477	19	0.514	20	0.495	21	1139	18
	Paraguay	3.5	0.602	15	0.649	12	0.626	15	1413	13
	El Salvador	3.7	0.454	20	0.503	21	0.479	22	788	20
	Mexico	4.0	0.758	6	0.695	11	0.727	6	2766	6
	Ecuador	4.5	0.613	14	0.762	5	0.687	9	1444	12
	Peru	5.0	0.590	16	0.560	17	0.575	17	1161	17
	Uruguay	5.2	0.830	2	0.553	18	0.692	8	3477	4
	Nicaragua	5.2	0.534	18	0.460	23	0.497	20	786	21
	Brazil	5.5	0.673	11	0.578	16	0.625	16	1877	9
	Panama	5.7	0.687	10	0.749	6	0.718	7	1818	10
	Honduras	5.7	0.435	22	0.696	10	0.565	18	695	22
	Argentina	6.0	0.790	4	0.469	22	0.629	14	5462	2
	Chile	6.0	0.753	7	0.550	19	0.652	11	2474	7
	Bolivia	6.4	0.442	21	0.594	14	0.518	19	900	19
	Cuba	6.5	0.719	9	0.737	7	0.728	5	1575	11
	Haiti	6.7	0.295	23	0.581	15	0.438	23	267	23

(cont'd)

(Table 4.14 cont'd)

Year	Country	LoD	HDI	R	ISC	R	I-HDI	R	GDP/C	R
1990	Barbados	1.0	0.894	1	0.910	1	0.902	1	6656	1
	Trinidad & T.	1.0	0.855	3	0.882	2	0.868	2	3209	3
	Venezuela	1.0	0.820	7	0.752	6	0.786	5	2353	6
	Costa Rica	1.0	0.848	5	0.803	3	0.825	3	1807	11
	Uruguay	1.2	0.859	2	0.695	10	0.777	6	2736	4
	Argentina	1.2	0.853	4	0.690	11	0.772	8	1892	9
	Dominican R.	1.2	0.638	17	0.688	12	0.663	15	953	18
	Jamaica	2.0	0.749	12	0.782	4	0.765	9	1600	12
	Ecuador	2.0	0.718	13	0.676	13	0.697	12	1005	16
	Honduras	2.0	0.524	22	0.737	7	0.630	17	660	21
	Bolivia	2.0	0.530	21	0.545	20	0.537	20	609	22
	Peru	2.2	0.642	16	0.477	22	0.559	19	1356	13
	Colombia	2.3	0.813	9	0.636	16	0.724	10	1219	14
	Brazil	2.5	0.756	11	0.601	17	0.678	14	3270	2
	El Salvador	2.5	0.543	20	0.498	21	0.521	21	1121	15
	Mexico	2.8	0.804	10	0.588	18	0.696	13	2396	5
	Nicaragua	3.2	0.583	18	0.449	23	0.516	22	792	20
	Guatemala	3.5	0.564	19	0.568	19	0.566	18	949	19
	Panama	3.9	0.816	8	0.731	8	0.774	7	1919	8
	Paraguay	4.9	0.679	14	0.639	15	0.659	16	990	17
	Chile	5.3	0.848	6	0.759	5	0.804	4	1958	7
	Haiti	6.5	0.354	23	0.642	14	0.498	23	439	23
	Cuba	7.0	0.666	15	0.728	9	0.697	11	1884	10

in 1990 were Panama (8th for the HDI, 8th for the ISC, and 7th for the I-HDI) and Chile (6th for the HDI, 5th for the ISC, and 4th for the I-HDI).

Quite a few countries in the LAT region displayed imbalances in their HDI/ISC ranks. Among the democratic states in 1970, Chile was ranked 6th for the HDI and 22nd for the ISC, Uruguay was ranked 3rd for the HDI and 19th for the ISC, and Colombia was ranked 12th for the HDI and 6th for the ISC. Three non-democratic states experienced imbalances at this date: the Dominican Republic was ranked 18th for the HDI and 9th for the ISC; Argentina was ranked 4th for the HDI and 10th for the ISC; and Ecuador was ranked 16th for the HDI and 8th for the ISC. The only democratic state with large discrepancies between its HDI and ISC ranks in 1980 was the Dominican Republic, which, as was the case in 1970, had a much higher ISC rank (8th) than HDI rank (17th). Among the non-democratic (3-5*) states, Ecuador and Honduras had much higher ISC ranks (5th and 10th) than HDI ranks (14th and 22nd), whereas Uruguay actually displayed the second highest HDI value (0.830) in the region despite having a dismal ISC rank (18th). From the non-democratic (6-7) group, Argentina and Chile both had very good HDI ranks (4th and 7th) but very poor ISC ranks (22nd and 19th). All six countries with imbalances in 1990 were democratic, of which four had considerably better HDI ranks than ISC ranks

(Uruguay, Argentina, Colombia and Mexico), while two had much better ISC ranks (Jamaica and Honduras).

Noticeably fewer countries in this region had large imbalances between their I-HDI ranks and GDP/C ranks. For the most part, those countries with ranks in the top half (R1-11) of the I-HDI scale were also ranked in the top half of the GDP/C scale, and vice versa. Throughout the period, there were only five cases where this rule did not apply. In 1970, Colombia was ranked 9th for the I-HDI but only 16th for GDP/C rates. In 1980, Brazil and Argentina were ranked 16th and 14th, respectively, for the I-HDI despite having relatively high GDP/C ranks (9th and 2nd). By 1990, Brazil's ranks had become even more polarized; though enjoying the region's second highest GDP/C rate ($3270), it was only ranked 14th for the I-HDI. Mexico was in a similar predicament: despite having the fifth highest GDP/C ($2396), it was ranked 13th for the I-HDI.

Just how the Latin American states compared against the three threshold standards can be seen in Table 4.15. On the whole, this region fared very well against the developing averages. Only three states (Bolivia, Haiti and Honduras) did not have an HDI value greater than the developing average in both 1970 and 1980, and only two (Honduras and Haiti) had a below average HDI value in 1990. The figures for the ISC were slightly worse: four states (Chile, Guatemala, Brazil and Haiti) had ISC values lower than the developing average in 1970; seven states (Guatemala, El Salvador, Peru, Nicaragua, Uruguay, Argentina and Chile) had below average ISC values in 1980; and six states (Bolivia, Peru, El Salvador, Mexico, Nicaragua and Guatemala) had below average ISC values in 1990. Regarding the I-HDI, only one LAT state (Haiti) failed to surpass the developing average in 1970. Owing to relatively poorer ISC values, the number of below average states stood at four (Guatemala, El Salvador, Nicaragua and Haiti) in 1980. By 1990, only five states (Bolivia, Peru, El Salvador, Nicaragua and Haiti) failed to surpass the I-HDI average for all developing states. To place these observations into context, 87-96% of all LAT states had HDI values above the developing averages for the period, 70-83% of LAT states had ISC values above the developing averages, and 78-96% of LAT states had I-HDI values above the developing averages.

The records of democratic states were particularly striking. In 1970, all eight LAT democracies surpassed the developing averages for the HDI and I-HDI, and seven (save for Chile) surpassed the developing ISC average. When compared to states at similar levels of economic development, all LAT democracies but Venezuela had above average HDI values, all but Chile and Uruguay had above average ISC values, and all but Chile and Venezuela had above average I-HDI values. Only Colombia failed to surpass the regional HDI average, and Chile and Uruguay failed to surpass the regional ISC average; all LAT democracies surpassed the regional I-HDI average. Four democracies (Barbados, Jamaica, Costa Rica, Trinidad and Tobago) exceeded every threshold standard; among the non-democratic states, only Argentina and Mexico achieved this feat.

Table 4.15 Evaluating Levels of Human Development Against Threshold Standards, LAT Region

Year	Country	LoD	Developing Avg. HDI	ISC	I-HDI	Income Avg. HDI	ISC	I-HDI	Regional Avg. HDI	ISC	I-HDI
1970	Barbados	1.0	+	+	+	+	+	+	+	+	+
	Jamaica	1.0	+	+	+	+	+	+	+	+	+
	Chile	1.5	+	-	+	+	-	-	+	-	+
	Costa Rica	1.5	+	+	+	+	+	+	+	+	+
	Trinidad & T.	1.5	+	+	+	+	+	+	+	+	+
	Venezuela	1.5	+	+	+	-	+	-	+	+	+
	Uruguay	2.0	+	+	+	+	-	+	+	-	+
	Colombia	2.5	+	+	+	+	+	+	-	+	+
	Dominican R.	3.0	+	+	+	+	+	+	-	+	-
	Guatemala	3.0	+	-	+	+	-	-	-	-	-
	Paraguay	3.5	+	+	+	+	+	+	-	-	-
	Argentina	4.0	+	+	+	+	+	+	+	+	+
	El Salvador	4.0	+	+	+	+	+	+	-	-	-
	Nicaragua	4.0	+	+	+	+	+	+	-	-	-
	Bolivia	4.5	-	+	+	-	+	+	-	-	-
	Panama	4.5	+	+	+	-	+	+	+	-	+
	Mexico	5.0	+	+	+	+	+	+	+	+	+
	Peru	5.0	+	+	+	-	-	-	-	-	-
	Brazil	5.5	+	-	+	-	-	-	-	-	-
	Ecuador	6.0	+	+	+	+	+	+	-	+	-
	Cuba	7.0	+	+	+	-	-	-	+	-	-
	Haiti	7.0	-	-	-	+	+	+	-	-	-
	Honduras	7.0	-	+	+	+	+	-	-	-	-
1980	Barbados	1.0	+	+	+	+	+	+	+	+	+
	Costa Rica	1.0	+	+	+	+	+	+	+	+	+
	Venezuela	1.0	+	+	+	+	+	+	+	+	+
	Colombia	2.0	+	+	+	+	+	+	+	-	-
	Dominican R.	2.0	+	+	+	+	+	+	-	+	-
	Jamaica	2.0	+	+	+	+	+	+	+	+	+
	Trinidad & T.	2.0	+	+	+	-	-	-	+	+	+
	Guatemala	3.4	+	-	-	+	-	-	-	-	-
	Paraguay	3.5	+	+	+	+	+	+	-	-	-
	El Salvador	3.7	+	-	-	-	-	-	-	-	-
	Mexico	4.0	+	+	+	+	+	+	+	+	+
	Ecuador	4.5	+	+	+	+	+	+	-	+	+
	Peru	5.0	+	-	+	+	-	+	-	-	-
	Nicaragua	5.2	+	-	-	+	-	-	-	-	-
	Uruguay	5.2	+	-	+	+	-	+	+	-	+
	Brazil	5.5	+	+	+	-	-	-	+	-	-
	Honduras	5.7	-	+	+	-	+	+	-	+	-
	Panama	5.7	+	+	+	-	+	+	+	+	+
	Argentina	6.0	+	-	+	-	-	-	+	-	-
	Chile	6.0	+	-	+	+	-	-	+	-	+
	Bolivia	6.4	-	+	+	-	-	-	-	-	-
	Cuba	6.5	+	+	+	+	+	+	+	+	+
	Haiti	6.7	-	+	-	+	+	+	-	-	-

(cont'd)

(Table 4.15 cont'd)

Year	Country	LoD	Developing Avg.			Income Avg.			Regional Avg.		
			HDI	ISC	I-HDI	HDI	ISC	I-HDI	HDI	ISC	I-HDI
1990	Barbados	1.0	+	+	+	-	+	+	+	+	+
	Costa Rica	1.0	+	+	+	+	+	+	+	+	+
	Trinidad & T.	1.0	+	+	+	+	+	+	+	+	+
	Venezuela	1.0	+	+	+	+	+	+	+	+	+
	Argentina	1.2	+	+	+	+	-	+	+	+	+
	Dominican R.	1.2	+	+	+	+	+	+	-	+	-
	Uruguay	1.2	+	+	+	+	+	+	+	+	+
	Bolivia	2.0	+	-	-	-	-	-	-	-	-
	Ecuador	2.0	+	+	+	+	+	+	+	+	+
	Honduras	2.0	-	+	+	-	+	+	-	+	-
	Jamaica	2.0	+	+	+	+	+	+	+	+	+
	Peru	2.2	+	-	-	+	-	-	-	-	-
	Colombia	2.3	+	+	+	+	+	+	+	-	+
	Brazil	2.5	+	+	+	-	-	-	+	-	-
	El Salvador	2.5	+	-	-	-	-	-	-	-	-
	Mexico	2.8	+	-	+	+	-	-	+	-	+
	Nicaragua	3.2	+	-	-	+	-	-	-	-	-
	Guatemala	3.5	+	-	+	-	-	-	-	-	-
	Panama	3.9	+	+	+	+	+	+	+	+	+
	Paraguay	4.9	+	+	+	+	+	+	-	-	-
	Chile	5.3	+	+	+	+	+	+	+	+	+
	Haiti	6.5	-	+	-	-	+	-	-	-	-
	Cuba	7.0	+	+	+	-	+	-	-	+	+

Notes. The actual 1970-90 averages were given in Table 4.4 (Dev), Table 4.9 (Inc), Table 4.11 (Reg).
(+) above threshold average, (-) below threshold average.

The records were even more impressive in 1980: all seven democratic states had HDI, ISC and I-HDI values above the developing averages; six states (excepting Trinidad and Tobago) had HDI, ISC and I-HDI values above the averages found for states at similar levels of economic development; and five states (excepting Colombia and the Dominican Republic) had HDI, ISC and I-HDI values above the regional averages. Four democracies (Barbados, Costa Rica, Venezuela and Jamaica) exceeded every threshold standard; the only non-democratic states to surpass all thresholds were Mexico and Cuba.

While the 'stable' democracies (Barbados, Costa Rica, Trinidad and Tobago, Venezuela, Jamaica and Colombia) continued to display exceptional records by 1990, the recently democratized states produced somewhat mixed records. Eleven of the 16 democracies (save for Bolivia, Honduras, Peru, El Salvador, and Mexico) displayed HDI, ISC and I-HDI averages above the developing averages. Against their respective income thresholds, most democracies produced above average index values, although the newly democratized states fared slightly worse; specifically, they accounted for four of the five

democratic states with below average HDI values, all six democratic states with below average ISC values, and all five democratic states with below average I-HDI values. Furthermore, all five democratic states with HDI values below the regional average were recently democratized, as were five of the six (excepting Colombia) democratic states with below average ISC values, and all six democratic states with below average I-HDI values. In all, there were six democratic states (Costa Rica, Trinidad and Tobago, Venezuela, Uruguay, Ecuador and Jamaica) which surpassed every threshold average, and three democratic states (Barbados, Argentina and Colombia) which surpassed every threshold average but one. The two non-democratic states with exceptional records, in the sense of also surpassing every threshold standard, were Panama and Chile.

The evidence suggests that democratic governance was closely associated with higher levels of human development in Latin America. This observation was valid for all three dates, although the influx of less developed, newly democratized states by 1990 created a wider distribution base along the human development scale. Levels of economic development and human development coincided very loosely, although, for the most part, the wealthy states had relatively high human development values and the poor states had low human development values. By this region's standards, democratic states tended to be wealthy, whereas the poorest states were predominantly non-democratic (once again with the exception of 1990, by which date some relatively poor states - El Salvador, Bolivia, Peru, Honduras - had become democratic).

Levels of Democracy and Human Development in the Middle East and North Africa, 1970-90

Democratic governance was virtually unheard of in the Middle East and North Africa (MID=13). Despite intermittent periods of military rule, Turkey was the only MID state with democratic LoD values for any of the three dates (2.5 for 1970 and 1980, 2.2 for 1990). As such, Turkey was a glaring exception to the region's political landscape: all other states were characterized by strongly authoritarian regimes. The democracy-development debate, therefore, viewed in the specific context of this region, involves pitting the record of Turkey against those of the twelve authoritarian states.

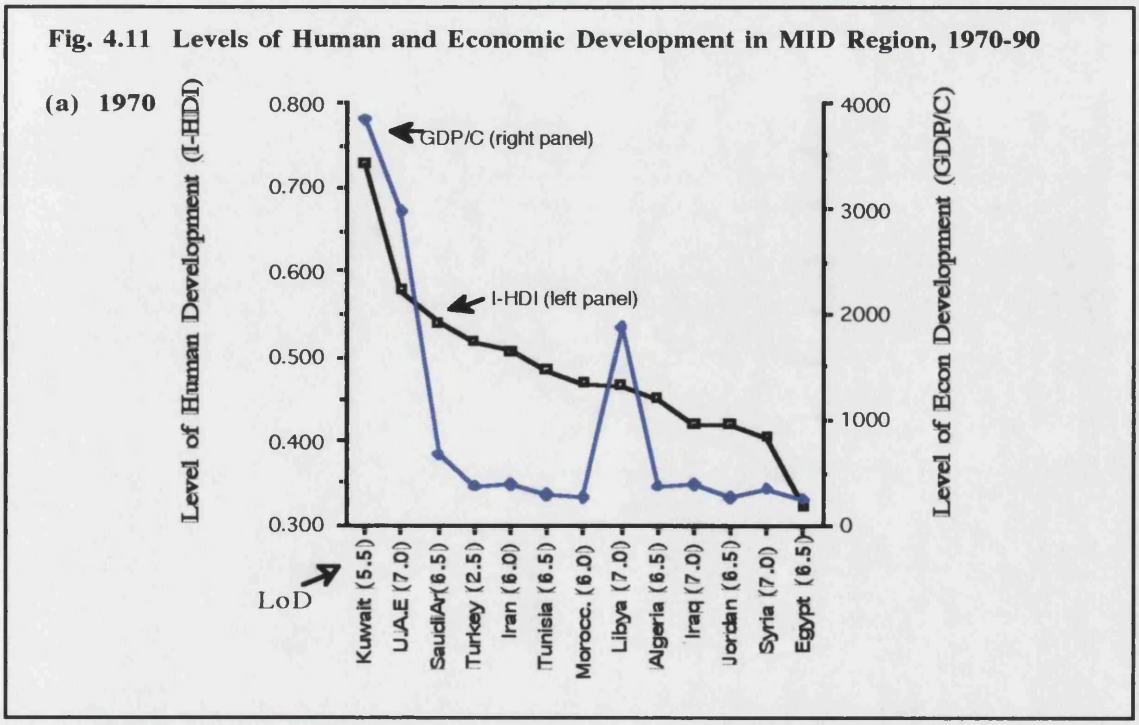
As gathered from Figure 4.11, Turkey was neither the most developed state in the region nor the wealthiest. From being the fourth most developed state in 1970, Turkey's position fell to ninth in both 1980 and 1990, primarily due to its conflict with its Kurdish minority (reflected in lower ISC values, as will be shown shortly). The most developed state in 1970, Kuwait (0.728), was also the wealthiest ($3,856), and the second most developed state, the UAE (0.578), was the second wealthiest ($2,976). The UAE enjoyed a higher GDP/C ($29,159) than Kuwait ($20,688) in 1980, although Kuwait was still more developed (I-HDI values of 0.768 for Kuwait and 0.704 for the UAE). By 1990, the UAE

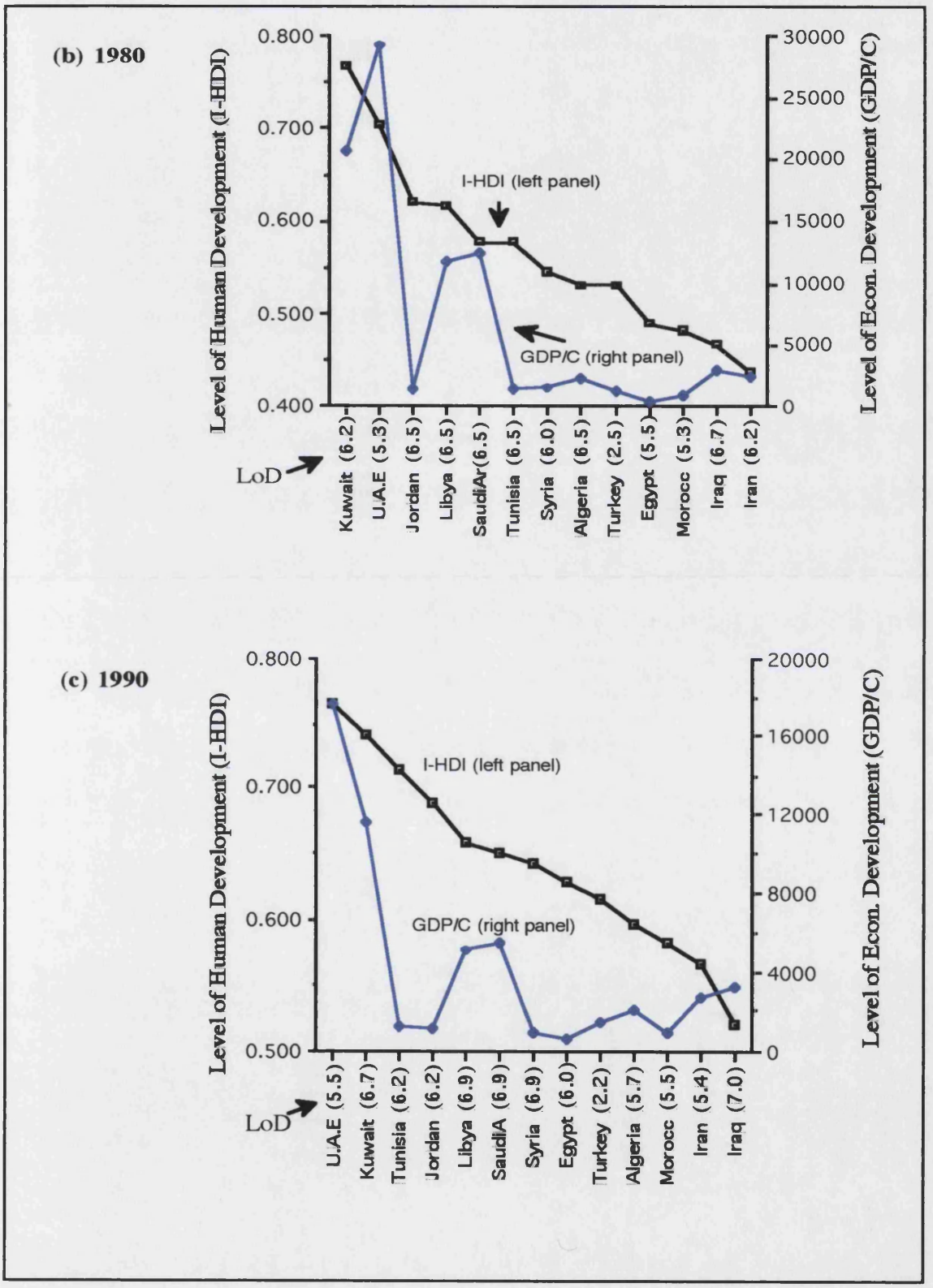
had become the wealthiest ($17,635) and most developed (0.765) state, ahead of Kuwait ($11,672 and 0.740). A high level of economic development, courtesy of oil revenues, underpinned the positions of the region's two most developed states.

The picture for the other states was less clear-cut. The great under-achiever in 1970 was Libya: despite having the region's third highest GDP/C ($1,873), Libya was ranked only eighth in terms of I-HDI values (0.467). Four states - Turkey, Iran, Tunisia and Morocco - had almost one-sixth Libya's GDP/C ($258-388) and yet displayed higher I-HDI scores. After the four wealthiest states - Kuwait, the UAE, Libya and Saudi Arabia - the remaining nine states shared broadly similar GDP/C rates. In fact, very little separated the fourth most developed state, Turkey ($358), from the region's least developed state, Egypt ($255); their respective I-HDI values were 0.516 and 0.324.

The patterns for 1980 showed a closer alignment between levels of economic and human development, although the relationship was far from linear. The four wealthiest states occupied positions near the top of the I-HDI scale, with relatively poorer Jordan ($1,373) separating Kuwait ($20,688) and the UAE ($29,159) from Libya ($11,735) and Saudi Arabia ($12,373). Hence, despite having approximately one-tenth of their GDP/C rates, Jordan exhibited a better I-HDI value (0.620) than both Libya (0.617) and Saudi Arabia (0.578). With a GDP/C rate ($1,281) comparable to Jordan's, Turkey had an I-HDI value of only 0.531. Tunisia also exhibited a noteworthy record, sharing an almost identical I-HDI value (0.577) as Saudi Arabia despite having a considerably lower GDP/C rate ($1,370). The two poorest states, Egypt ($526) and Morocco ($971), were located near the bottom of the I-HDI scale, ahead of Iraq and Iran.

Fig. 4.11 Levels of Human and Economic Development in MID Region, 1970-90




(b) 1980
Level of Human Development (I-HDI)
Level of Econ. Development (GDP/C)
0.800
0.700
0.600
0.500
0.400
30000
25000
20000
15000
10000
5000
0
I-HDI (left panel)
GDP/C (right panel)
LoD
Kuwait (6.2)
U.A.E (5.3)
Jordan (6.5)
Libya (6.5)
SaudiAr(6.5)
Tunisia (6.5)
Syria (6.0)
Algeria (6.5)
Turkey (2.5)
Egypt (5.5)
Morocc (5.3)
Iraq (6.7)
Iran (6.2)
(c) 1990
Level of Human Development (I-HDI)
Level of Econ. Development (GDP/C)
0.800
0.700
0.600
0.500
20000
16000
12000
8000
4000
0
I-HDI (left panel)
GDP/C (right panel)
LoD
U.A.E (5.5)
Kuwait (6.7)
Tunisia (6.2)
Jordan (6.2)
Libya (6.9)
SaudiA (6.9)
Syria (6.9)
Egypt (6.0)
Turkey (2.2)
Algeria (5.7)
Morocc (5.5)
Iran (5.4)
Iraq (7.0)

The four wealthiest states in 1990 also occupied positions along the top of the I-HDI scale. Sandwiched between the UAE ($17,635) and Kuwait ($11,672), on the one hand, and Libya ($5,094) and Saudi Arabia ($5,538) on the other, Jordan and Tunisia continued to display decent human development records despite their relatively lower GDP/C rates ($1,147 and $1,251). Turkey had a similar GDP/C rate ($1,461) but a lower I-HDI value of 0.615, compared to 0.689 for Jordan and 0.714 for Tunisia. The region's poorest states, Egypt ($652), Syria ($884) and Morocco ($916), were ranked 8th, 7th, and 11th in terms of the I-HDI. War-ravaged Iran and Iraq were found at the bottom of the I-HDI scale, despite their upper-middle GDP/C ranks (6th and 5th).

Table 4.16 presents the data for the MID region. Turkey exhibited top five HDI, ISC and I-HDI ranks in 1970, although its GDP/C rank (8th) fell into the lower-middle range. By 1980, Turkey's ISC rank had fallen to 10th (its conflict with the Kurds was reflected in a worse Security Index value), which, together with a slight decline in its HDI rank (8th), meant that its I-HDI rank (9th) had plunged towards the lower-middle part of the scale. Its relative ISC position deteriorated further by 1990 (11th), although its I-HDI rank remained the same (due to a marked improvement in its HDI value, ranking Turkey 4th).

Unquestionably, the best records for all dates belonged to Kuwait and the UAE The majority of states produced inconsistent records across the indices, as reflected by the differences in their HDI and ISC ranks. Of the six states with sizeable 'imbalances' in 1970, four - Saudi Arabia (3rd and 7th), the UAE (2nd and 8th), Iraq (4th and 12th) and Syria (6th and 11th) - had much better HDI ranks, while two - Morocco (12th and 2nd) and Tunisia (10th and 3rd) - had much better ISC ranks. There were seven states with imbalances in 1980, of which four - Syria (4th and 11th), Saudi Arabia (5th and 9th), Libya (3rd and 8th) and Iraq (6th and 13th) - displayed considerably better HDI ranks, and three - Egypt (13th and 5th), Tunisia (9th and 4th) and Algeria (11th and 6th) - displayed noticeably better ISC ranks. The imbalances were even more pronounced by 1990, although the number of states with these symptoms declined to six: two - Turkey (4th and 11th) and Saudi Arabia (3rd and 10th) - had better HDI ranks; four - Morocco (13th and 7th), Algeria (11th and 6th), Egypt (12th and 4th) and Jordan (9th and 2nd) - had better ISC ranks.

To a much greater degree than was observed for the ASI and LAT regions, there were quite a few cases where I-HDI and GDP/C ranks varied considerably. The largest discrepancies in 1970 belonged to Libya (8th for the I-HDI and 3rd for GDP/C) and Iraq (10th for the I-HDI and 5th for GDP/C). By 1980, Iraq continued to show a much better GDP/C rank (5th) than I-HDI rank (12th), although Iran, too, failed to make the substantial I-HDI gains (ranked 13th, or last in the region) that its GDP/C rank (6th) might have allowed. Jordan illustrated the opposite tendency, exhibiting the third best I-HDI rank despite having a lower-middle GDP/C rank (9th). Of the five states with serious I-HDI and GDP/C imbalances in 1990, two - Iran (12th and 6th) and Iraq (13th and 5th) - had better

Table 4.16 Human Development Values By Level of Democracy, MID Region

Year	Country	LoD	HDI	R	ISC	R	I-HDI	R	GDP/C	R
1970	Turkey	2.5	0.441	5	0.592	5	0.516	4	358	8
	Kuwait	5.5	0.684	1	0.772	1	0.728	1	3856	1
	Iran	6.0	0.406	7	0.607	4	0.507	5	388	6
	Morocco	6.0	0.282	12	0.654	2	0.468	7	258	11
	Saudi Arabia	6.5	0.511	3	0.567	7	0.539	3	673	4
	Algeria	6.5	0.323	11	0.579	6	0.451	9	376	7
	Tunisia	6.5	0.340	10	0.626	3	0.483	6	281	10
	Jordan	6.5	0.405	8	0.433	10	0.419	11	258	12
	Egypt	6.5	0.269	13	0.379	13	0.304	13	255	13
	UAE	7.0	0.601	2	0.556	8	0.578	2	2976	2
	Libya	7.0	0.403	9	0.532	9	0.467	8	1873	3
	Iraq	7.0	0.452	4	0.390	12	0.421	10	391	5
	Syria	7.0	0.419	6	0.391	11	0.405	12	344	9
1980	Turkey	2.5	0.549	8	0.513	10	0.531	9	1281	11
	UAE	5.3	0.719	2	0.689	2	0.704	2	29159	1
	Morocco	5.3	0.383	12	0.579	7	0.481	11	971	12
	Egypt	5.5	0.360	13	0.621	5	0.490	10	526	13
	Syria	6.0	0.658	4	0.433	11	0.545	7	1484	8
	Kuwait	6.2	0.769	1	0.766	1	0.768	1	20688	2
	Iran	6.2	0.497	10	0.375	12	0.436	13	2488	6
	Tunisia	6.4	0.499	9	0.655	4	0.577	6	1370	10
	Saudi Arabia	6.5	0.629	5	0.527	9	0.578	5	12373	3
	Libya	6.5	0.676	3	0.559	8	0.617	4	11735	4
	Algeria	6.5	0.476	11	0.587	6	0.531	8	2260	7
	Jordan	6.5	0.553	7	0.688	3	0.620	3	1373	9
	Iraq	6.7	0.581	6	0.356	13	0.468	12	2848	5
1990	Turkey	2.2	0.739	4	0.491	11	0.615	9	1461	8
	Iran	5.4	0.672	8	0.460	12	0.566	12	2720	6
	UAE	5.5	0.771	2	0.758	1	0.765	1	17635	1
	Morocco	5.5	0.549	13	0.614	7	0.582	11	916	11
	Algeria	5.7	0.553	11	0.639	6	0.596	10	2024	7
	Egypt	6.0	0.551	12	0.704	4	0.628	8	652	13
	Tunisia	6.2	0.690	7	0.738	3	0.714	3	1251	9
	Jordan	6.2	0.628	9	0.750	2	0.689	4	1147	10
	Kuwait	6.7	0.804	1	0.677	5	0.740	2	11672	2
	Saudi Arabia	6.9	0.742	3	0.558	10	0.650	6	5538	3
	Libya	6.9	0.703	6	0.611	8	0.657	5	5094	4
	Syria	6.9	0.727	5	0.560	9	0.643	7	884	12
	Iraq	7.0	0.614	10	0.427	13	0.520	13	3220	5

GDP/C ranks, and three - Egypt (8th and 13th), Tunisia (3rd and 9th), Jordan (4th and 10th) - had better I-HDI ranks.

When evaluated against the three threshold standards, Turkey's human development record was mixed (Table 4.17 overleaf). In 1970, it surpassed the developing averages for the HDI, ISC and I-HDI. Compared to states at the same general level of economic development, Turkey had above average HDI and I-HDI values, but a below average ISC value. In regional terms, it surpassed the MID averages for the HDI, ISC and I-HDI. Turkey's human development record had, however, worsened by 1980. It still had HDI and I-HDI (but not ISC) values greater than the developing averages, but only its HDI value exceeded the income threshold averages. Moreover, Turkey's HDI, ISC and I-HDI values were all below the regional averages. Matters had improved very marginally by 1990: Turkey's HDI value was higher than the developing, income and regional averages, and its I-HDI value was higher than the developing and income (but not regional) averages; its ISC value was lower than the developing, income and regional averages.

On the whole, the MID states had respectable records when evaluated against the developing averages. Nine of the 13 states had above average HDI values in 1970 (save for Morocco, Algeria, Egypt and Tunisia), eleven had above average HDI values in 1980 (save for Morocco and Egypt), and all 13 states had above average HDI values in 1990. Considerably fewer states had ISC values higher than the developing averages: only five in 1970 (Turkey, Kuwait, Iran, Morocco, and Tunisia); seven in 1980 (the UAE, Morocco, Egypt, Kuwait, Tunisia, Algeria and Jordan); and eight in 1990 (the UAE, Morocco, Algeria, Egypt, Jordan, Tunisia, Kuwait, and Libya). With the exception of 1970, when only five states (Turkey, Kuwait, Iran, Saudi Arabia and the UAE) surpassed the I-HDI developing average, the majority of MID states had above average I-HDI values: nine in 1980 (save for Morocco, Egypt, Iran and Iraq); and twelve in 1990 (save for only Iraq).

Arguably the most interesting basis of comparison involves the income thresholds. The extent to which this region, in general, failed to translate its vast wealth into human development progress can be observed in the large number of below average HDI, ISC and I-HDI values found for all three dates. When evaluated against the HDI averages found for countries at similar levels of economic development, only three MID states (Turkey, Jordan and Syria) had higher values in 1970, three (Turkey, Tunisia and Jordan) had higher values in 1980, and four (Turkey, Tunisia, Jordan and Syria) had higher values in 1990. The record of MID states against their respective ISC income thresholds was even more dismal: only Morocco and Tunisia had above average values in 1970; only Egypt, Tunisia and Jordan had above average values in 1980; and only Morocco, Egypt, Jordan and Tunisia had above average values in 1990. Incredibly, only Turkey displayed an above average I-HDI value in relation to its income threshold in 1970, only Tunisia and Jordan displayed above average I-HDI values in 1980, and only Turkey, Egypt, Jordan, Tunisia and Syria displayed I-HDI values above their respective income thresholds in 1990. One cannot fail to notice, from this

Table 4.17 Evaluating Levels of Human Development Against Threshold Standards, MID Region

Year	Country	LoD	Developing Avg. HDI	ISC	I-HDI	Income Avg. HDI	ISC	I-HDI	Regional Avg. HDI	ISC	I-HDI
1970	Turkey	2.5	+	+	+	+	-	+	+	+	+
	Kuwait	5.5	+	+	+	-	-	-	+	+	+
	Iran	6.0	+	+	+	-	-	-	-	+	+
	Morocco	6.0	-	+	-	-	+	-	-	+	-
	Algeria	6.5	-	-	-	-	-	-	-	+	-
	Egypt	6.5	-	-	-	-	-	-	-	-	-
	Jordan	6.5	+	-	-	+	-	-	-	-	-
	Saudi Arabia	6.5	+	-	+	-	-	-	+	+	+
	Tunisia	6.5	-	+	-	-	+	-	-	+	-
	Iraq	7.0	+	-	-	-	-	-	+	-	-
	Libya	7.0	+	-	-	-	-	-	-	-	-
	Syria	7.0	+	-	-	+	-	-	-	-	-
	UAE	7.0	+	-	+	-	-	-	+	-	+
1980	Turkey	2.5	+	-	+	+	-	-	-	-	-
	UAE	5.3	+	+	+	-	-	-	+	+	+
	Morocco	5.3	-	+	-	-	-	-	-	+	-
	Egypt	5.5	-	+	-	-	+	-	-	+	-
	Syria	6.0	+	-	+	-	-	-	+	-	-
	Iran	6.2	+	-	-	-	-	-	-	-	-
	Kuwait	6.2	+	+	+	-	-	-	+	+	+
	Tunisia	6.4	+	+	+	+	+	+	-	+	+
	Algeria	6.5	+	+	+	-	-	-	-	+	-
	Jordan	6.5	+	+	+	+	+	+	-	+	+
	Libya	6.5	+	-	+	-	-	-	+	-	+
	Saudi Arabia	6.5	+	-	+	-	-	-	+	-	+
	Iraq	6.7	+	-	-	-	-	-	+	-	-
1990	Turkey	2.2	+	-	+	+	-	+	+	-	-
	Iran	5.4	+	-	+	-	-	-	-	-	-
	UAE	5.5	+	+	+	-	-	-	+	+	+
	Morocco	5.5	+	+	+	-	+	-	-	+	-
	Algeria	5.7	+	+	+	-	-	-	-	+	-
	Egypt	6.0	+	+	+	-	+	+	-	+	-
	Jordan	6.2	+	+	+	+	+	+	-	+	+
	Tunisia	6.2	+	+	+	+	+	+	+	+	+
	Kuwait	6.7	+	+	+	-	-	-	+	+	+
	Libya	6.9	+	+	+	-	-	-	+	-	+
	Saudi Arabia	6.9	+	-	+	-	-	-	+	-	+
	Syria	6.9	+	-	+	+	-	+	+	-	+
	Iraq	7.0	+	-	-	-	-	-	-	-	-

Notes. The actual 1970-90 averages were given in Table 4.4 (Dev), Table 4.9 (Inc), Table 4.11 (Reg).
(+) above threshold average, (-) below threshold average.

account, that none of the oil-rich states (Kuwait, the UAE, Iran, Algeria, Saudi Arabia, Iraq or Libya) managed to surpass any income threshold (HDI, ISC or I-HDI) at any given date. The reason is fairly clear: most tended to be located in either the INC 1 or INC 2 categories, where their records compared very unfavourably against those of the industrialized states (OECD and Communist) and the more developed Latin American and Asian states.

Very few states managed to exceed the regional HDI, ISC and I-HDI averages for all three dates: Kuwait, Saudi Arabia, and the UAE posted above average HDI and I-HDI values; and Kuwait, Morocco, Algeria and Tunisia displayed above average ISC values. Only Kuwait managed to surpass the regional HDI, ISC and I-HDI averages throughout the period. Turkey showed above average HDI, ISC and I-HDI values in 1970, below average HDI, ISC and I-HDI values in 1980, and an above average HDI value, but below average ISC and I-HDI values, in 1990.

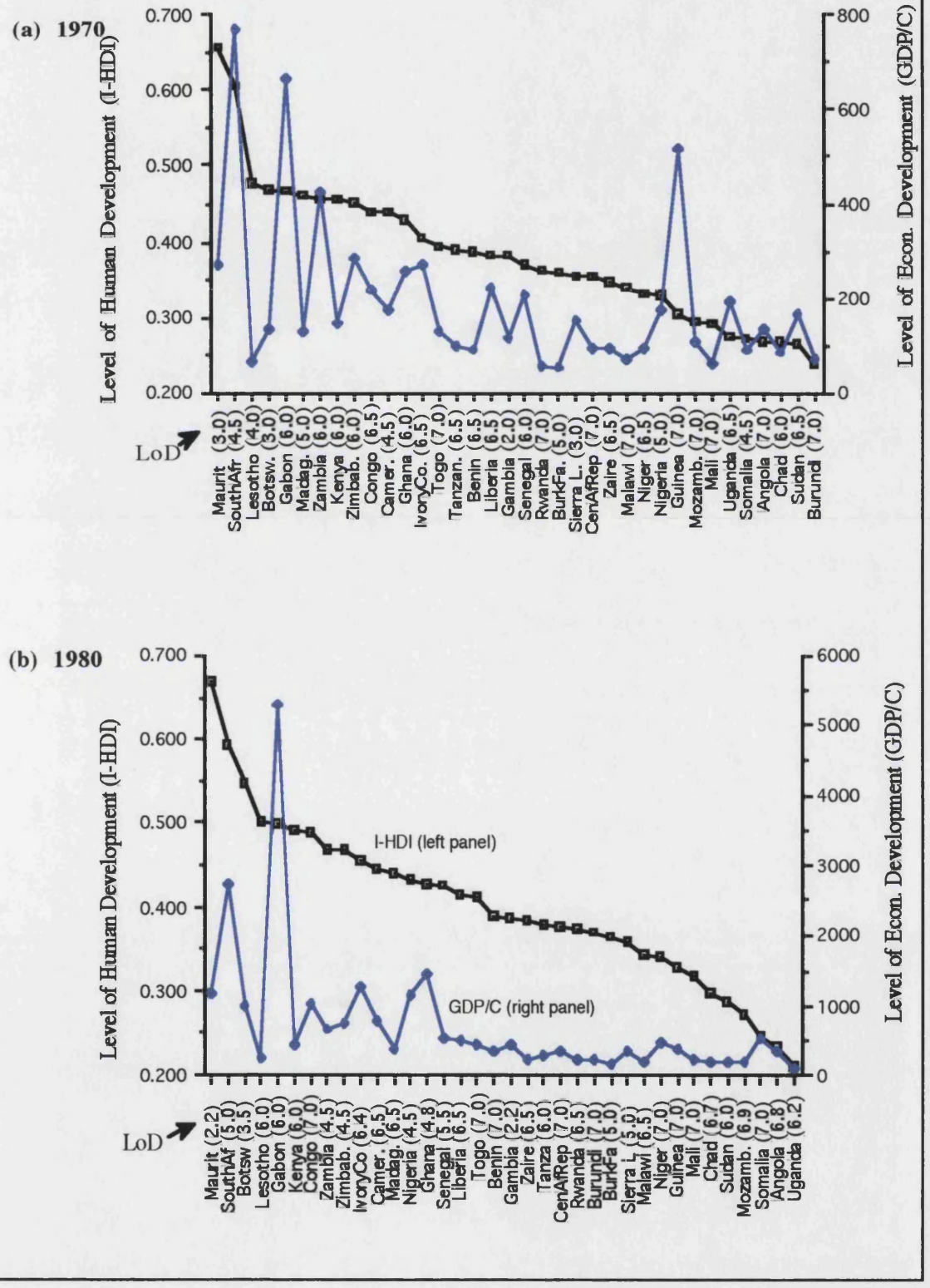
Owing to several factors, then, one would be hard-pressed to formulate any concrete generalizations about democracy and development in this region. It would be unwise to attach too much significance to the record of Turkey as the solitary democratic representative. Turkey compared favourably against some authoritarian states and unfavourably against others, although its record varied by index and date. Furthermore, the twelve authoritarian states did not constitute a monolithic entity: their human development records differed substantially. The wealthiest states in the region were, by and large, the most developed. There were, however, ample cases where states with similar GDP/C rates had considerably different I-HDI values, and vice versa.

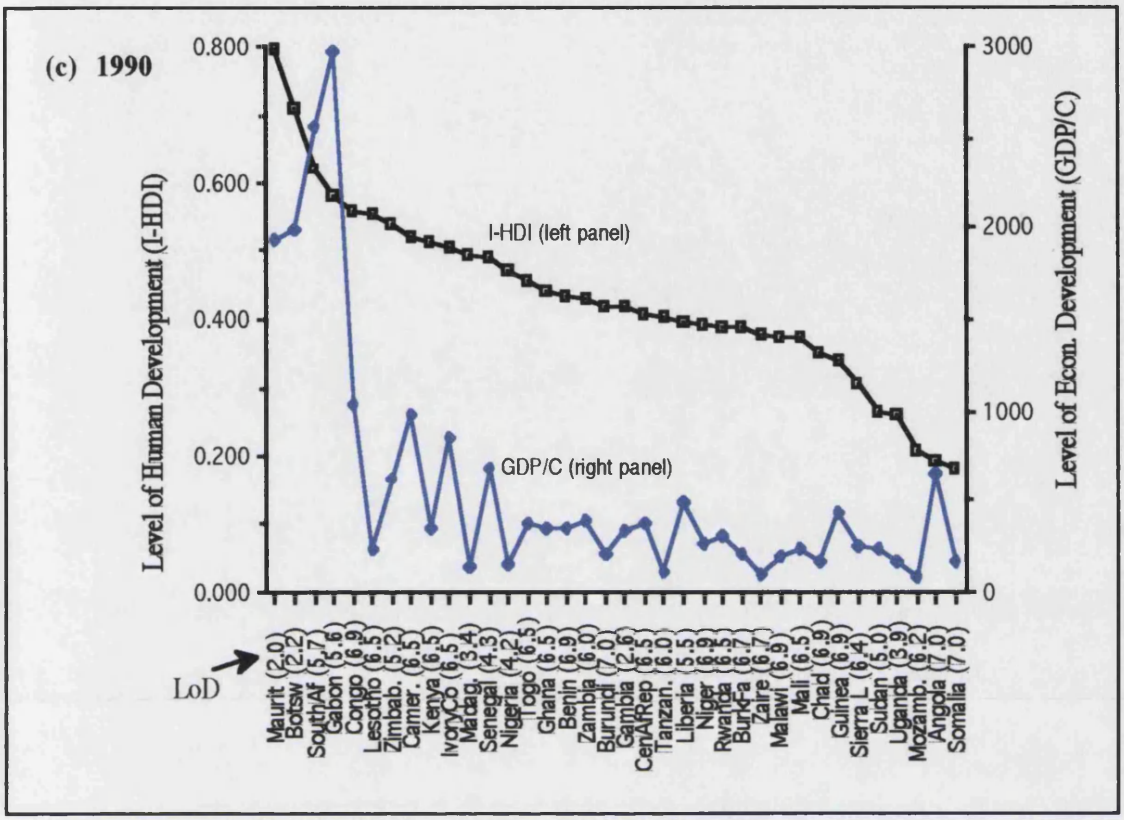
Levels of Democracy and Human Development in sub-Saharan Africa 1970-90

Preciously few experiments in democratic governance were attempted in sub-Saharan Africa (AFR=36) over the 1970-90 period. In fact, only Gambia met the statistical definition of a democracy (LoD 1.0-2.9) for all three dates. Mauritius fell just outside the range in 1970 (LoD 3.0) but did qualify in 1980 (LoD 2.2) and 1990 (LoD 2.0). Much the same may be said in the case of Botswana (which will be treated at greater length in Chapter 7): it narrowly failed to qualify in 1970 (LoD 3.0) and 1980 (LoD 3.5), but did so in 1990 (LoD 2.2). These three states were by far the most democratic in a region characterized by strongly authoritarian regimes.

Some idea of the sheer scale of collective misery experienced by this region may be gathered from Figure 4.12. In terms of human development (left-hand panel), 34 of the 36 countries (94%) had Low I-HDI values (less than 0.500); the only exceptions being Mauritius (0.656) and South Africa (0.606). The situation had barely improved by 1980: with Botswana (0.548) and Lesotho (0.502) also crossing the 0.500 mark, 32 countries (89%) remained mired at the Low I-HDI Level. Although ten countries displayed values

Fig. 4.12 Levels of Human and Economic Development in AFR Region, 1970-90





above 0.500 by 1990, still leaving 72% of AFR states at the Low Level, there was a sizeable gulf between the two most developed states, Mauritius (0.797) and Botswana (0.712), and the rest (the third most developed state, South Africa, had an I-HDI value of 0.619).

The extent of material poverty may also be measured in terms of economic development (right-hand panel): 33 of the 36 countries had GDP/C rates below $500 in 1970, the three exceptions being South Africa ($768), Gabon ($664) and Guinea ($518). By 1980, 29 countries (or 81%) had GDP/C rates of less than $1000, of which 23 (or 64%) had GDP/C rates of less than $500. This picture had become even bleaker by 1990: 31 countries (or 86%) had GDP/C rates of less than $1000, and 26 countries (or 72%) had GDP/C rates of less than $500.

Given the very low levels of human and economic development in the region, one should hardly be surprised that democratic rule did not take root and flourish. Nor can one make any generalizations on the basis of those states that did succeed in establishing democratic institutions: Mauritius began and ended the period with relatively high human development values (0.656 and 0.797), and progressed from having a very low GDP/C rate ($271) in 1970 to a respectable rate ($1939) by 1990; Botswana was poor ($156) and undeveloped (0.468) in 1970 but had become relatively prosperous ($1989) and developed (0.712) by 1990; Gambia remained very poor and undeveloped throughout the period (from $116 and 0.381 in 1970, to $334 and 0.417 in 1990).

Despite being the most developed state in the region, Mauritius was never the wealthiest. In terms of GDP/C, Mauritius was ranked 6th in 1970, 5th in 1980, and 4th in 1990. Mauritius' human development record therefore becomes all the more impressive when contrasted with those of the region's two wealthiest states, South Africa and Gabon. In 1970, Mauritius had roughly one-third of South Africa's GDP/C ($768) and one-half of Gabon's ($664), and yet posted a higher I-HDI value (0.656) than either (0.606 and 0.467). South Africa's GDP/C ($2,740) was more than twice as great as Mauritius' ($1,170) in 1980, and Gabon's was five times as great ($5,305); however, Mauritius' I-HDI value (0.668) was considerably higher (0.593 for South Africa and 0.499 for Gabon). Interestingly, although the income gap had narrowed by 1990 - with GDP/C rates of $2,569 for South Africa, $2,978 for Gabon, and $1,939 for Mauritius - the human development gap had widened: the I-HDI rates were 0.797 for Mauritius, 0.619 for South Africa, and 0.581 for Gabon.

Botswana's accomplishments were even more dramatic, for although it consistently appeared among the most developed states (4th in 1970, 3rd in 1980, 2nd in 1990), its GDP/C rank improved from 19th in 1970 to 3rd by 1990. To place this progress into perspective, one may compare Botswana's record to those of two states beginning the period at very similar I-HDI and GDP/C levels, Lesotho and Madagascar. All three states were quite poor (GDP/C rates below $150) and undeveloped (around the 0.470 mark) in 1970. By 1980, Botswana's I-HDI value had increased to 0.548, Lesotho's had increased to 0.502, and Madagascar's had declined slightly to 0.441. However, during that same period Botswana's GDP/C had risen to $990, compared to $274 for Lesotho and $372 for Madagascar; in other words, Botswana had become roughly four times as wealthy as Lesotho and three times as wealthy as Madagascar. This increased wealth paid handsome human development dividends over the next period. Botswana's I-HDI value had surged to 0.712 by 1990 (behind only Mauritius at 0.797), while Lesotho and Madagascar still hovered around the 0.500 mark (0.555 for Lesotho and 0.493 for Madagascar). Botswana's GDP/C had doubled to $1,989, essentially equaling Mauritius ($1,939), whereas Lesotho's GDP/C decreased slightly to $234 and Madagascar's dropped to a more pitiful $139.

Gambia did not enjoy any such flattering comparisons. With an I-HDI value of 0.381 and a GDP/C of $116, Gambia began the period at roughly the same levels of human and economic development as Botswana, Lesotho and Madagascar. But by 1990, Botswana was six times as wealthy as Gambia and considerably more developed (Gambia had yet to cross the 0.500 mark). Furthermore, despite being wealthier ($334) than the two non-democratic states, Gambia had a lower I-HDI value (0.417) than both Lesotho and Madagascar. Though dire in absolute terms, when judged in relative terms Gambia's record appeared less dismal, for it displayed a higher I-HDI value than 16 of the 23 non-democratic states with GDP/C rates of less than $200 in 1970, 16 of the 22 non-democratic states with GDP/C rates of less than $500 in 1980, and 16 of the 25 non-democratic states with GDP/C rates of less than $500 in 1990.

The importance of economic development to human development may also be confirmed for this region. This may not appear obvious upon first glance at the graphs, especially given the slightly more erratic patterns for 1970. But although the GDP/C rates fell within a quite narrow band, it may be noted that, irrespective of date, the wealthiest states were among the most developed. Nine of the 10 wealthiest states in 1970 were located along the top half of the I-HDI scale (ranks 1-18), the exception being Guinea (28th). This observation was confirmed for the other dates as well: the ten wealthiest states in 1980, and 9 of the 10 wealthiest states in 1990 (excepting war-torn Angola at R35), were found at the top half of the I-HDI scale.

Table 4.18 provides a detailed look at the human development values for the AFR region during the period. The three largely democratic states arrived at their overall human development (I-HDI) records in different ways. Mauritius consistently displayed high HDI, ISC and I-HDI values, ranking 2nd for the HDI and 1st for the ISC and I-HDI in both 1970 and 1980, and 1st for the HDI, ISC and I-HDI in 1990. Botswana also displayed consistently high ranks for every index (HDI, ISC and I-HDI): 9th, 4th and 4th for 1970; 4th, 2nd and 3rd for 1980; and 2nd for all three indices for 1990. But prior to 1990, Botswana's HDI and I-HDI values were, in absolute terms, quite low, while its ISC values could be referred to as decent (above 0.600). Botswana's index values had improved dramatically by 1990, and the disparity between its HDI and ISC values had largely been eliminated. Gambia's relatively mediocre regional I-HDI ranks throughout the period - 18th for 1970, 19th for 1980 and 1990 - masked enormous imbalances between its HDI and ISC ranks: 35th and 3rd for 1970; 34th and 4th for 1980; and 30th and 8th for 1990. Whereas Gambia therefore displayed decent ISC values (by-products of its comparatively better Liberty and Security Index values), its HDI values, reflecting the individual capability indicators, were among the lowest in the world (only 0.215 by 1990).

In addition to Gambia, undoubtedly the region's most extreme example, the table also reveals a number of other cases where such HDI/ISC imbalances occurred: among those states with very severe imbalances in favour of ISC ranks were Burkina Faso (1970, 1980, 1990), Benin (1970, 1980, 1990) and Senegal (1980, 1990); and among those states with severe imbalances in favour of HDI ranks were two of the region's wealthiest states, Gabon (1970, 1980) and South Africa (1970, 1980, 1990).

The three most democratic states struck a fairly consistent balance between their I-HDI and GDP/C ranks. Ranked 6th (1970), 5th (1980) and 4th (1990) in terms of GDP/C, Mauritius remained the most developed state throughout the period. Botswana displayed the 4th highest I-HDI value in 1970, despite being ranked only 19th for GDP/C. As Botswana became progressively wealthier, the gap between the country's I-HDI and GDP/C ranks started to diminish: it was ranked 3rd and 8th in 1980; and 2nd and 3rd in 1990. Gambia exhibited mid-range I-HDI and GDP/C ranks: 18th and 22nd for 1970; 19th and 18th for 1980; and 19th (both I-HDI and GDP/C) for 1990. Among the authoritarian states which

Table 4.18 Human Development Values By Level of Democracy, AFR Region

Year	Country	LoD	HDI	R	ISC	R	I-HDI	R	GDP/C	R
1970	Gambia	2.0	0.107	35	0.655	3	0.381	18	116	22
	Mauritius	3.0	0.524	2	0.787	1	0.656	1	271	6
	Sierra Leone	3.0	0.155	29	0.556	20	0.355	22	156	16
	Botswana	3.0	0.284	9	0.652	4	0.468	4	134	19
	Lesotho	4.0	0.307	6	0.643	5	0.475	3	66	33
	South Africa	4.5	0.591	1	0.620	8	0.606	2	768	1
	Cameroon	4.5	0.253	12	0.625	7	0.439	11	175	13
	Somalia	4.5	0.124	32	0.418	30	0.271	32	93	29
	Nigeria	5.0	0.230	16	0.431	29	0.330	27	175	14
	Madagascar	5.0	0.291	8	0.634	6	0.462	6	133	20
	Burkina Faso	5.0	0.116	33	0.599	12	0.358	21	54	36
	Gabon	6.0	0.378	3	0.557	19	0.467	5	664	2
	Zambia	6.0	0.315	5	0.600	11	0.457	7	427	4
	Zimbabwe	6.0	0.326	4	0.578	13	0.452	9	287	5
	Ghana	6.0	0.283	10	0.577	14	0.430	12	257	8
	Senegal	6.0	0.176	25	0.563	18	0.370	19	208	11
	Kenya	6.0	0.254	11	0.658	2	0.456	8	148	17
	Chad	6.0	0.135	30	0.401	31	0.268	34	89	30
	Ivory Coast	6.5	0.243	14	0.567	16	0.405	13	271	7
	Liberia	6.5	0.229	17	0.536	21	0.382	17	224	9
	Congo	6.5	0.307	7	0.573	15	0.440	10	217	10
	Uganda	6.5	0.213	19	0.336	35	0.274	31	197	12
	Sudan	6.5	0.188	23	0.339	34	0.264	35	167	15
	Tanzania	6.5	0.211	20	0.566	17	0.388	15	101	24
	Niger	6.5	0.134	31	0.532	22	0.333	26	96	26
	Zaire	6.5	0.235	15	0.461	28	0.348	24	95	27
	Benin	6.5	0.162	27	0.611	9	0.386	16	93	28
	Guinea	7.0	0.111	34	0.499	26	0.305	28	518	3
	Angola	7.0	0.195	22	0.342	33	0.268	33	137	18
	Togo	7.0	0.183	24	0.606	10	0.395	14	130	21
	Mozambique	7.0	0.248	13	0.342	32	0.295	29	108	23
	Cen. Afr. Re.	7.0	0.196	21	0.512	23	0.354	23	97	25
	Malawi	7.0	0.176	26	0.503	25	0.339	25	71	31
	Burundi	7.0	0.157	28	0.319	36	0.238	36	70	32
	Mali	7.0	0.102	36	0.483	27	0.293	30	63	34
	Rwanda	7.0	0.215	18	0.509	24	0.362	20	58	35
1980	Gambia	2.2	0.148	34	0.623	4	0.386	19	425	18
	Mauritius	2.2	0.626	2	0.710	1	0.668	1	1170	5
	Botswana	3.5	0.414	4	0.683	2	0.548	3	990	8
	Zimbabwe	4.5	0.386	6	0.547	17	0.466	9	751	10
	Nigeria	4.5	0.297	14	0.571	12	0.434	13	1125	6
	Zambia	4.5	0.342	9	0.593	8	0.467	8	677	11
	Ghana	4.8	0.323	13	0.535	20	0.429	14	1451	3
	South Africa	5.0	0.629	1	0.557	14	0.593	2	2740	2
	Sierra Leone	5.0	0.177	29	0.537	19	0.357	26	337	23
	Burkina Faso	5.0	0.151	32	0.580	11	0.365	25	185	35
	Senegal	5.5	0.233	21	0.619	5	0.426	15	536	12
	Gabon	6.0	0.468	3	0.530	21	0.499	5	5305	1
	Kenya	6.0	0.340	10	0.645	3	0.492	6	426	17
	Tanzania	6.0	0.282	16	0.477	29	0.380	21	279	25
	Lesotho	6.0	0.404	5	0.600	7	0.502	4	274	26
	Sudan	6.0	0.229	22	0.348	32	0.288	32	209	31
	Uganda	6.2	0.215	26	0.211	36	0.213	36	124	36
	Ivory Coast	6.4	0.330	12	0.582	9	0.456	10	1242	4
	Cameroon	6.5	0.332	11	0.556	15	0.444	11	779	9
	Liberia	6.5	0.277	17	0.548	16	0.413	16	488	14

(cont'd)

(Table 4.18 cont'd)

Year	Country	LoD	HDI	R	ISC	R	I-HDI	R	GDP/C	R
	Madagascar	6.5	0.344	8	0.538	18	0.441	12	372	20
	Zaire	6.5	0.286	15	0.482	28	0.384	20	234	28
	Rwanda	6.5	0.244	20	0.506	26	0.375	23	225	30
	Malawi	6.5	0.216	25	0.472	30	0.344	27	201	33
	Chad	6.7	0.151	33	0.442	31	0.297	31	205	32
	Angola	6.8	0.212	27	0.258	35	0.235	35	363	21
	Mozambique	6.9	0.247	19	0.296	34	0.272	33	199	34
	Congo	7.0	0.368	7	0.611	6	0.490	7	1022	7
	Somalia	7.0	0.162	31	0.332	33	0.247	34	515	13
	Niger	7.0	0.163	30	0.516	24	0.340	28	454	15
	Togo	7.0	0.255	18	0.570	13	0.412	17	432	16
	Guinea	7.0	0.148	35	0.507	25	0.328	29	385	19
	Cen. Afr. R.	7.0	0.226	23	0.527	22	0.376	22	343	22
	Benin	7.0	0.197	28	0.581	10	0.389	18	336	24
	Mali	7.0	0.146	36	0.492	27	0.319	30	243	27
	Burundi	7.0	0.219	24	0.520	23	0.370	24	230	29
1990	Mauritius	2.0	0.778	1	0.815	1	0.797	1	1939	4
	Botswana	2.2	0.670	2	0.754	2	0.712	2	1989	3
	Gambia	2.6	0.215	30	0.619	8	0.417	19	334	19
	Madagascar	3.4	0.396	10	0.589	15	0.493	11	139	33
	Uganda	3.9	0.272	23	0.252	33	0.262	33	173	29
	Nigeria	4.2	0.348	14	0.594	12	0.471	13	157	32
	Senegal	4.3	0.322	16	0.658	3	0.490	12	690	8
	Sudan	5.0	0.276	20	0.258	32	0.267	32	240	23
	Zimbabwe	5.2	0.474	6	0.606	10	0.540	7	625	10
	Liberia	5.5	0.317	17	0.474	29	0.395	22	497	11
	Gabon	5.6	0.525	4	0.638	6	0.581	4	2978	1
	South Africa	5.7	0.650	3	0.588	16	0.619	3	2569	2
	Zambia	6.0	0.352	13	0.508	22	0.430	17	388	13
	Tanzania	6.0	0.306	19	0.501	24	0.403	21	107	34
	Mozambique	6.2	0.252	27	0.170	34	0.211	34	84	36
	Sierra Leone	6.4	0.209	33	0.401	31	0.305	31	251	22
	Cameroon	6.5	0.447	8	0.594	13	0.520	8	986	6
	Ivory Coast	6.5	0.370	12	0.640	5	0.505	10	849	7
	Togo	6.5	0.311	18	0.599	11	0.455	14	381	14
	Cen. Afr. R.	6.5	0.249	28	0.568	19	0.409	20	374	15
	Kenya	6.5	0.434	9	0.590	14	0.512	9	357	16
	Ghana	6.5	0.382	11	0.497	25	0.440	15	353	18
	Rwanda	6.5	0.274	22	0.506	23	0.390	24	310	20
	Mali	6.5	0.214	31	0.529	21	0.372	28	236	24
	Lesotho	6.5	0.476	5	0.634	7	0.555	6	234	25
	Burkina Faso	6.7	0.203	35	0.577	17	0.390	25	216	26
	Zaire	6.7	0.341	15	0.411	30	0.376	26	102	35
	Congo	6.9	0.461	7	0.652	4	0.557	5	1031	5
	Guinea	6.9	0.191	36	0.491	26	0.341	30	432	12
	Benin	6.9	0.261	25	0.609	9	0.435	16	355	17
	Niger	6.9	0.209	34	0.573	18	0.391	23	266	21
	Malawi	6.9	0.260	26	0.486	28	0.373	27	195	28
	Chad	6.9	0.212	32	0.489	27	0.350	29	165	31
	Angola	7.0	0.271	24	0.120	36	0.195	35	665	9
	Burundi	7.0	0.276	21	0.563	20	0.419	18	207	27
	Somalia	7.0	0.217	29	0.148	35	0.183	36	173	30

managed to do considerably more in human development terms than their GDP/C rates might have suggested (i.e., with severe imbalances in favour of their I-HDI ranks), the case of Lesotho stands out: despite being one of the poorest states in the region (33rd in 1970, 26th in 1980, 25th in 1990), it displayed relatively high I-HDI ranks (3rd in 1970, 4th in 1980, 6th in 1990). On the other hand, the individual examples of Guinea in 1970 (28th for the I-HDI, 3rd for GDP/C) and Angola in 1990 (35th for the I-HDI, 9th for GDP/C) illustrate the opposite imbalance; where, for a variety of reasons (e.g. war in Angola), national income appears to have been squandered.

Table 4.19 compares the records of the AFR states against the three threshold standards. For the region as a whole, the picture was miserable. Only Mauritius, South Africa and Gabon had HDI values above the developing average in 1970 and 1980, and only Mauritius, South Africa and Botswana had above average HDI values in 1990. One-third (12) of AFR states had ISC values above the developing averages in 1970, 1980 and 1990. Only two states, Mauritius and South Africa, had above average I-HDI values for all three dates, Botswana had above average I-HDI values in 1980 and 1990, and Gabon had an above average I-HDI value in 1990. Regarding the most democratic states: Mauritius surpassed the developing HDI, ISC and I-HDI averages for all three dates; Botswana surpassed the developing HDI average for 1990 only, the developing ISC averages for all three dates, and the developing I-HDI averages for 1980 and 1990; Gambia had below average HDI and I-HDI values, and above average ISC values, for all three dates.

Since almost all AFR states were located in the same income category (INC 4) throughout the period, the patterns found for the income and regional thresholds were broadly similar. Mauritius had above average HDI, ISC and I-HDI values relative to its income (INC 3 for 1970 and 1980, INC 2 for 1990) and regional thresholds for all three dates. Botswana almost equaled this feat: although it surpassed every index regional average, relative to its respective income thresholds (INC 4 for 1970, INC 3 for 1980, INC 2 for 1990) Botswana failed to surpass the HDI averages for 1980 and 1990, and the I-HDI average for 1990. Gambia's record was unimpressive, though consistent for all three dates: relative to its income thresholds (INC 4), it displayed below average HDI values and above average ISC and I-HDI values; relative to the regional thresholds, it had below average HDI and I-HDI values and above average ISC values.

It would be unwise to forward any generalizations about democracy and development in sub-Saharan Africa. As was the case in the MID region, democratic states were rare. Moreover, even within this small democratic camp the differences could not be more pronounced: what lessons may be drawn, for example, from the successful cases of Mauritius and Botswana, on the one hand, and the unsuccessful case of Gambia on the other? On a broader note, while the authoritarian states overwhelmingly exhibited very low human development values (the partial exceptions being South Africa and Gabon), the wealthier states tended have comparatively higher values than the poorest states, once again confirming the seminal influence of economic development.

Table 4.19 Evaluating Levels of Human Development Against Threshold Standards, AFR Region

Year	Country	LoD	Developing Avg. HDI	ISC	I-HDI	Income Avg. HDI	ISC	I-HDI	Regional Avg. HDI	ISC	I-HDI
1970	Gambia	2.0	-	+	-	-	+	+	-	+	-
	Botswana	3.0	-	+	-	+	+	+	+	+	+
	Mauritius	3.0	+	+	+	+	+	+	+	+	+
	Sierra Leone	3.0	-	-	-	-	+	+	-	+	-
	Lesotho	4.0	-	+	-	+	+	+	+	+	+
	Cameroon	4.5	-	+	-	+	+	+	+	+	+
	Somalia	4.5	-	-	-	-	-	-	-	-	-
	South Africa	4.5	+	+	+	-	-	-	+	+	+
	Burkina Faso	5.0	-	+	-	-	+	+	-	+	-
	Madagascar	5.0	-	+	-	+	+	+	+	+	+
	Nigeria	5.0	-	-	-	+	-	-	-	-	-
	Chad	6.0	-	-	-	-	-	-	-	-	-
	Gabon	6.0	+	-	-	-	-	-	+	+	+
	Ghana	6.0	-	-	-	-	-	-	+	+	+
	Kenya	6.0	-	+	-	+	+	+	+	+	+
	Senegal	6.0	-	-	-	-	-	-	-	+	-
	Zambia	6.0	-	+	-	-	-	-	+	+	+
	Zimbabwe	6.0	-	-	-	-	-	-	+	+	+
	Benin	6.5	-	+	-	-	+	+	-	+	+
	Congo	6.5	-	-	-	-	-	-	+	+	+
	Ivory Coast	6.5	-	-	-	-	-	-	+	+	+
	Liberia	6.5	-	-	-	-	-	-	-	+	-
	Niger	6.5	-	-	-	-	+	-	-	-	-
	Sudan	6.5	-	-	-	-	-	-	-	-	-
	Tanzania	6.5	-	-	-	+	+	+	-	+	+
	Uganda	6.5	-	-	-	-	-	-	-	-	-
	Zaire	6.5	-	-	-	+	-	-	+	-	-
	Angola	7.0	-	-	-	-	-	-	-	-	-
	Burundi	7.0	-	-	-	-	-	-	-	-	-
	Cen. Afr. R.	7.0	-	-	-	-	+	+	-	-	-
	Guinea	7.0	-	-	-	-	-	-	-	-	-
	Malawi	7.0	-	-	-	-	+	-	-	-	-
	Mali	7.0	-	-	-	-	-	-	-	-	-
	Mozambique	7.0	-	-	-	+	-	-	+	-	-
	Rwanda	7.0	-	-	-	+	+	+	-	-	-
	Togo	7.0	-	+	-	-	+	+	-	+	+
1980	Gambia	2.2	-	+	-	-	+	+	-	+	-
	Mauritius	2.2	+	+	+	+	+	+	+	+	+
	Botswana	3.5	-	+	+	-	+	+	+	+	+
	Zimbabwe	4.5	-	-	-	-	-	-	+	+	+
	Nigeria	4.5	-	+	-	-	-	-	+	+	+
	Zambia	4.5	-	+	-	-	-	-	+	+	+
	Ghana	4.8	-	-	-	-	-	-	+	+	+
	Burkina Faso	5.0	-	+	-	-	+	-	-	+	-
	Sierra Leone	5.0	-	-	-	-	+	-	-	+	-
	South Africa	5.0	+	-	+	-	-	-	+	+	+
	Senegal	5.5	-	+	-	-	+	-	-	+	+
	Gabon	6.0	+	-	-	-	-	-	+	+	+
	Kenya	6.0	-	+	-	+	+	+	+	+	+
	Lesotho	6.0	-	+	-	+	+	+	+	+	+
	Sudan	6.0	-	-	-	-	-	-	-	-	-
	Tanzania	6.0	-	-	-	+	-	+	-	-	-
	Uganda	6.2	-	-	-	-	-	-	-	-	-
	Ivory Coast	6.4	-	+	-	-	-	-	+	+	+

(cont'd)

(Table 4.19 cont'd)

Year	Country	LoD	Developing Avg. HDI	ISC	I-HDI	Income Avg. HDI	ISC	I-HDI	Regional Avg. HDI	ISC	I-HDI
	Cameroon	6.5	-	-	-	-	-	-	+	+	+
	Liberia	6.5	-	-	-	+	+	+	-	+	+
	Madagascar	6.5	-	-	-	+	+	+	+	+	+
	Malawi	6.5	-	-	-	-	-	-	-	-	-
	Rwanda	6.5	-	-	-	-	+	+	-	-	-
	Zaire	6.5	-	-	-	+	-	+	+	-	-
	Chad	6.7	-	-	-	-	-	-	-	-	-
	Angola	6.8	-	-	-	-	-	-	-	-	-
	Mozambique	6.9	-	-	-	-	-	-	-	-	-
	Benin	7.0	-	+	-	-	+	+	-	+	-
	Burundi	7.0	-	-	-	-	+	-	-	+	-
	Cen. Afr. R.	7.0	-	-	-	-	+	+	-	+	-
	Congo	7.0	-	+	-	-	+	-	+	+	+
	Guinea	7.0	-	-	-	-	+	-	-	-	-
	Mali	7.0	-	-	-	-	+	-	-	-	-
	Niger	7.0	-	-	-	-	+	-	-	-	-
	Somalia	7.0	-	-	-	-	-	-	-	-	-
	Togo	7.0	-	-	-	+	+	+	-	+	+
1990	Mauritius	2.0	+	+	+	+	+	+	+	+	+
	Botswana	2.2	+	+	+	-	+	-	+	+	+
	Gambia	2.6	-	+	-	-	+	+	-	+	-
	Madagascar	3.4	-	-	-	+	+	+	+	+	+
	Uganda	3.9	-	-	-	-	-	-	-	-	-
	Nigeria	4.2	-	+	-	+	+	+	+	+	+
	Senegal	4.3	-	-	-	-	+	-	-	+	+
	Sudan	5.0	-	-	-	-	-	-	-	-	-
	Zimbabwe	5.2	-	+	-	-	-	-	+	+	+
	Liberia	5.5	-	-	-	-	-	-	-	-	-
	Gabon	5.6	-	+	+	-	-	-	+	+	+
	South Africa	5.7	+	-	+	-	-	-	+	+	+
	Tanzania	6.0	-	-	-	-	+	-	-	-	-
	Zambia	6.0	-	-	-	+	+	+	+	-	-
	Mozambique	6.2	-	-	-	-	-	-	-	-	-
	Sierra Leone	6.4	-	-	-	-	-	-	-	-	-
	Cameroon	6.5	-	+	-	-	-	-	+	+	+
	Cen. Afr. R.	6.5	-	-	-	-	+	+	-	+	-
	Ghana	6.5	-	-	-	+	+	+	+	-	+
	Ivory Coast	6.5	-	+	-	-	+	-	+	+	+
	Kenya	6.5	-	-	-	+	+	+	+	+	+
	Lesotho	6.5	-	+	-	+	+	+	+	+	+
	Mali	6.5	-	-	-	-	+	-	-	+	-
	Rwanda	6.5	-	-	-	-	+	-	-	-	-
	Togo	6.5	-	+	-	-	+	+	-	+	+
	Burkina Faso	6.7	-	-	-	-	+	-	-	+	-
	Zaire	6.7	-	-	-	+	-	-	-	-	-
	Benin	6.9	-	+	-	-	+	+	-	+	+
	Chad	6.9	-	-	-	-	-	-	-	-	-
	Congo	6.9	-	+	-	-	+	-	+	+	+
	Guinea	6.9	-	-	-	-	-	-	-	-	-
	Malawi	6.9	-	-	-	-	-	-	-	-	-
	Niger	6.9	-	-	-	-	+	-	-	+	-
	Angola	7.0	-	-	-	-	-	-	-	-	-
	Burundi	7.0	-	-	-	-	+	+	-	+	-
	Somalia	7.0	-	-	-	-	-	-	-	-	-

Notes. The actual 1970-90 averages were given in Table 4.4 (Dev), Table 4.9 (Inc), Table 4.11 (Reg).
(+) above threshold average, (-) below threshold average.

4.4 Summary of Chapter Findings

The findings presented in this chapter confirm the existence of a general relationship between democracy and levels of human development. Specifically, it has been shown that, over the course of the 1970-90 period, there were strong correlations between democratic governance and higher human development values (Table 4.1). That the lines of causation ran from the latter to the former was proven in two respects: democratic averages corresponded to higher index rank groups (Figure 4.1); and democracies were overwhelmingly located among the highest index levels, declining noticeably in numbers thereafter (Figure 4.2, Table 4.3). It was further demonstrated that, on average, democratic states consistently displayed by far the highest human development values (Figure 4.3), a point also confirmed, albeit to a lesser degree, in the developing world (Figure 4.3b, Table 4.4).

Given its impact on both variables, the level of economic development must be factored into any analysis of democracy and human development (Table 4.5). On average, levels of economic development were higher for democratic states when all states were considered, but not when developing states were considered alone (Figure 4.4). Moreover, as levels of economic development increased, LoD values became, on average, more democratic (Figures 4.5a and 4.6a, Table 4.6) and human development values increased (Figures 4.5b and 4.6b). After controlling for similar levels of economic development, it was shown that democracies, on average, consistently displayed the highest human development values (Tables 4.8 and 4.9, Figure 4.7).

Levels of democracy and human development varied greatly from one region to another (Figure 4.8). Although democratic states were, on average, the most developed in the majority of cases across the regions (Table 4.10), and while a greater number, proportionally, displayed human development values above the regional averages (Table 4.11), a closer look at the regional cases (Tables 4.12-4.19, Figures 4.9-4.12) confirms that only in Latin America can one claim, with any conviction, that democratic rule corresponded to higher levels of human development; but even here, however, one should also consider the impact of economic development and the less convincing picture for 1990.

CHAPTER 5
DEMOCRACY AND HUMAN DEVELOPMENT PERFORMANCE

Having established that democracy is typically associated with higher levels of human development, this chapter focuses on the relationship between democracy and human development performance (rates of change). Two interrelated questions will therefore be addressed. First, is there a direct linkage between improvements in human development conditions and the level of democracy? Second, on average, do democratic states perform better, worse, or no different than non-democratic states?

Scholars have been hampered, until recently at least, by the lack of time-series data which would make cross-country comparisons of human development performance possible. Basic economic data may have been available for decades, but Morris' Physical Quality of Life Index (PQLI) only appeared in the late 1970s (with limited time-series coverage), followed by the first Human Development Report in 1990 (subsequent editions provided time-series data for the Human Development Index). Consequently, what few studies there have been (Chapter 1) have tended to follow the misguided tendency of extrapolating, from single-date statistics, generalizations about *rates of change*, instead of simply accounting for human development *levels* at particular dates.

This chapter is divided into five parts. Section 5.1 examines the general relationship between levels of democracy and index performance rates.[1] Section 5.2 considers the notion of take-off points and controls for similar index levels. The next two sections provide further discriminatory variables: section 5.3 assesses performance rates after controlling for similar levels of economic development; section 5.4 depicts how performance rates vary across regions. A summary of the findings is presented in section 5.5.

5.1 General Patterns

This section considers the *general* relationship between levels of democracy and human development performance. No discriminating variables will be employed for the moment, allowing one to establish the basic terms of the debate, which will then be tested and modified in the sections to follow. It will first be argued that, on the basis of the correlations and rank-group profiles, there is no clear-cut link whatsoever between levels of

[1]Since a focus on performance rates involves the use of period measures, LoD and index values have been adjusted accordingly. A period LoD value is the average LoD score over a given period; hence, a value in the 1-2* range signifies that a particular country was democratic (overall) during the period in question (for details see Technical Note 1). The index performance rate for a given period is simply the difference between the point index values. For example, a country's I-HDI performance rate for the period 1970-80 is calculated as:

I-HDI Perf (1970-80) = I-HDI (1980) - I-HDI (1970)

A positive value indicates an improvement in index conditions, while a negative value indicates a deterioration in index conditions.

democracy and human development progress. It will then be shown, however, that when distribution patterns and average rates are taken into account, democratic states did not perform as well over the 1970-90 period as non-democratic states, thereby leading into a discussion of the need for controlling variables in section 5.2.

Correlations and Rank Group Profiles

The first indication that there is no general relationship between the level of democracy and index performance rates can be found in the extremely weak and erratic correlations depicted in Table 5.1 (recorded for two samples, All States and Developing States, and for three periods, 1970/80, 1980/90, and 1970/90).

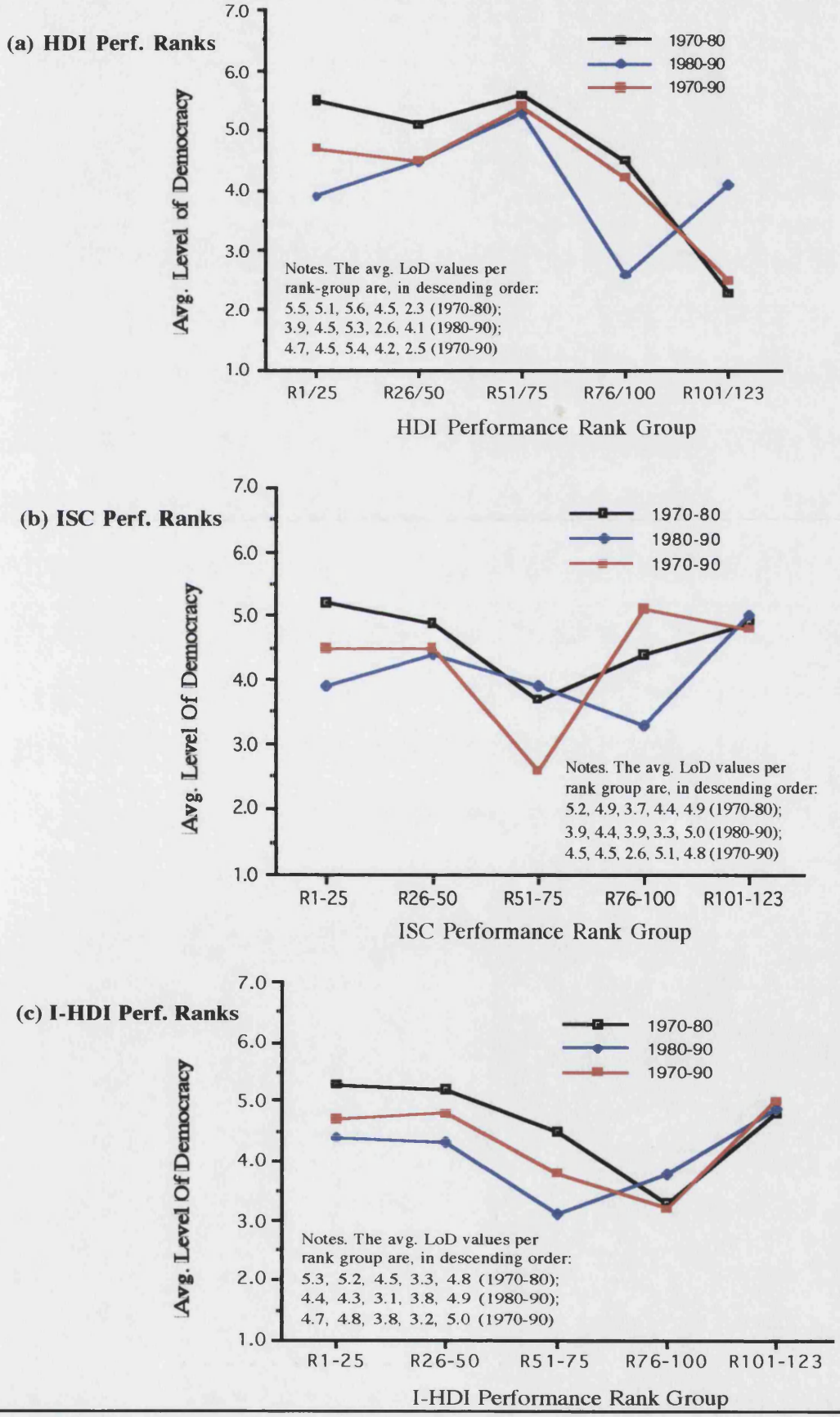
Table 5.1 Correlations Between Levels of Democracy and Index Performance Rates

Index		All (N=123) 1970/80	1980/90	1970/90	Developing (N=88) 1970/80	1980/90	1970/90
HDI	r=	0.318	0.013	0.217	0.050	-0.212	-0.117
	r^2=	0.101	0.000	0.047	0.003	0.045	0.014
ISC	r=	0.013	-0.121	-0.080	0.103	-0.069	0.053
	r^2=	0.000	0.015	0.006	0.011	0.005	0.003
I-HDI	r=	0.169	-0.083	0.054	0.107	-0.155	-0.019
	r^2=	0.028	0.007	0.003	0.011	0.024	0.000

Over the two shorter periods, LoD values may explain, at most, between 0-10% of the variation in HDI rates for the All States sample (0-4.5% for Developing States), 0-1.5% of the variation in ISC rates (0-1.1% for Developing States), and 1-2.8% of the variation in I-HDI rates (1.1-2.4% for Developing States). Remarkably, over the longer 1970-90 period, *0%* of the variation in I-HDI rates, in both samples, may be explained by LoD values. The very nature of the correlations is also confusing, with the results fluctuating between positive and negative values; for example, in the All States sample, from 0.013 (1970-80) to -0.121 (1980-90) for ISC rates, and from 0.169 (1970-80) to -0.083 (1980-90) for I-HDI rates.

Performance rank group profiles provide further confirmation that no clear-cut relationships exist between the variables (Figure 5.1). The profiles for the HDI, ISC and I-HDI have been constructed using the methods described in Chapter 4 (section 4.1). Countries were first ranked according to their respective index performance rates and divided into five rank groups, with the top 25-ranked countries comprising the R1-25 group. The average level of democracy (LoD value) for each rank group was then calculated.

Fig. 5.1 Average Level Of Democracy Per Index Performance Rank Group



Given the weak and inconsistent correlations, it is not surprising that fairly 'horizontal' patterns were produced. Instead of progressively increasing LoD averages across rank groups (translated into ascending slopes for index levels in Chapter 4), LoD averages fell within a quite narrow value band, largely in the 3.0-5.5 range. Since any fluctuations from this band were slight, it follows that performance rank groups were generally not distinguishable by levels of democracy.

The rank group profile for HDI performance rates is presented in graph (a). The patterns produced for each period were somewhat erratic, although still within the aforementioned narrow band of averages; over the 1970-90 period the LoD averages were: 4.7, 4.5, 5.4, 4.2 and 2.5. The only consistency appears to be the democratic averages found among the poorest performing groups. Indicatively, the R101-123 group displayed the most democratic LoD average for two of the periods (2.3 for 1970-80, and 2.5 for 1970-90), while the R76-100 group displayed an LoD average of 2.6 for 1980-90. These findings suggest that democracies, primarily in the form of the OECD states, tended to exhibit relatively lower HDI performance rates; but, as will be demonstrated, this phenomenon is explained by the fact that they were already concentrated at the uppermost HDI levels, leaving them comparably less 'room to develop' on the fixed HDI scale.

The patterns produced in the rank group profile for ISC performance rates (graph b) were also somewhat uniform. That the LoD averages fell within a narrow value band is depicted by the almost horizontal slopes across the rank groups (excepting the occasional dip). The LoD averages for the top and bottom performing groups (R1-25 and R101-123) were virtually identical (5.2 and 4.9 for 1970-80, 4.5 and 4.8 for 1970-90). Moreover, LoD averages fluctuated among the performance rank groups by differences of only 1.5 (1970-80), 1.7 (1980-90), and 2.6 (1970-90). The only democratic LoD average (2.6) was found for the R51-75 group (1970-90), an indication of how widely dispersed democracies were throughout the performance rank groups.

The rank group profile for I-HDI performance rates is given in graph (c). Despite some slight dips for each period (at R51-75 for 1980-90, and R76-100 for 1970-80 and 1970-90), the patterns here appear to be even more 'horizontal' than those found for the other indices. For instance, the 1970-80 period produced LoD averages of 5.3, 5.2, 4.5, 3.3, and 4.8. Furthermore, the LoD averages for the top and bottom performing groups (R1-25 and R101-123) were essentially indistinguishable: 5.3 and 4.8 for 1970-80; 4.4 and 4.9 for 1980-90; and 4.7 and 5.0 for 1970-90. As expected, performance rank groups could not be distinguished on the basis of average levels of democracy.

Comparing Levels of Democracy: General Performance Rates In Perspective, 1970-90

Given that no firm rules govern the general relationship between democracy and human development performance, one may consider how the three levels of democracy compared in terms of improving HDI, ISC and I-HDI conditions over the period of this

study. Specifically, after initially examining the distribution of countries by performance rate brackets, the actual average index rates (1970-90) produced by the LoD groups will be analyzed.

Performance rate brackets indicate the range of index increases produced by each level of democracy. The obvious question that arises is whether democracies tended to be located among the best or worst performers (or somewhere in between) for the period? Figure 5.2 (overleaf) depicts the distribution of countries by (a) HDI, (b) ISC and (c) I-HDI performance rates and levels of democracy (the percentage of democratic states in each performance rate bracket is given in parenthesis).

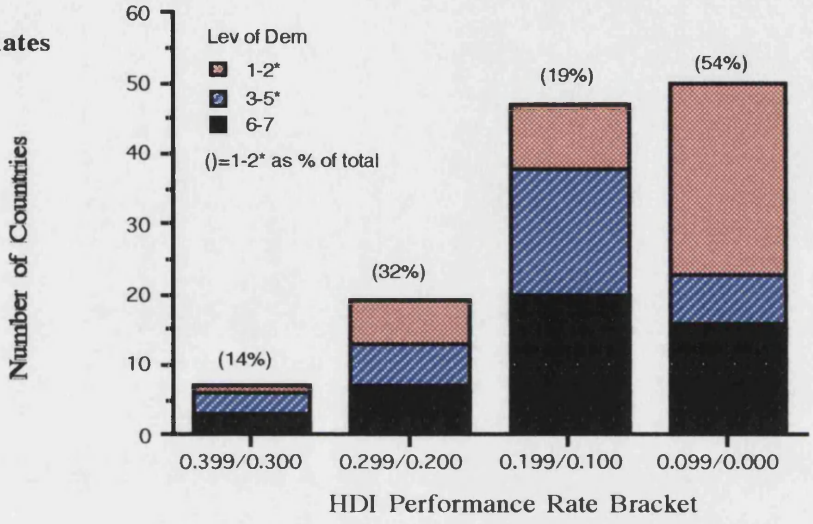
Looking first at HDI rates (graph a), it is apparent that most countries in the sample (50 of 123) were located in the lowest HDI performance bracket, with increases between 0.099/0.000 index points. A disproportionately high number of these countries (27, or 54%) were democracies. At the other extreme, seven countries exhibited performance rates in the highest range (0.399/0.300): three non-democratic (3-5*) states (South Korea, Thailand, and Botswana); three non-democratic (6-7) states (Syria, Libya, and Tunisia); and one democratic state (Malaysia). Democratic states were proportionately represented (comprising 6 of 19 states, or 32%) in the second highest performance bracket (0.299/0.200), and accounted for 9 of the 47 (or 19%) countries in the 0.199/0.100 range.

ISC performance rates are shown in graph (b). Once again, the largest single block of countries (51 of 123) was found in the lowest rate increase bracket (0.099/0.000). The majority of democratic states (26) were located here, comprising a disproportionately high percentage (51%) of all the states in this range. There were only four countries which exhibited ISC performance rates of 0.399/0.300 - Portugal (1-2*), Indonesia (3-5*), Egypt (6-7) and Jordan (6-7). Spain (1-2*) was one of five countries in the 0.299/0.200 performance range (the improved social conditions experienced by both Spain and Portugal were partly attributable to the dramatic increases in their respective LIB index values following the establishment of democratic rule in the 1970s.) In the next performance bracket, 4 of the 17 states with ISC increases between 0.199/0.100 were democracies. Although 11 of the 43 democratic states in the sample displayed negative ISC rates (i.e., their ISC values in 1990 were lower than their ISC values for 1970), none joined the likes of Nicaragua, Yugoslavia, Afghanistan, Somalia, and Angola in the -0.299/-0.200 bracket. Hence, while non-democratic states were better represented in the top three ISC increase ranges, they comprised a much higher proportion of poor performers: 80% (-0.001/-0.099); 58% (-0.100/-0.199); and 100% (-0.200/-0.299).

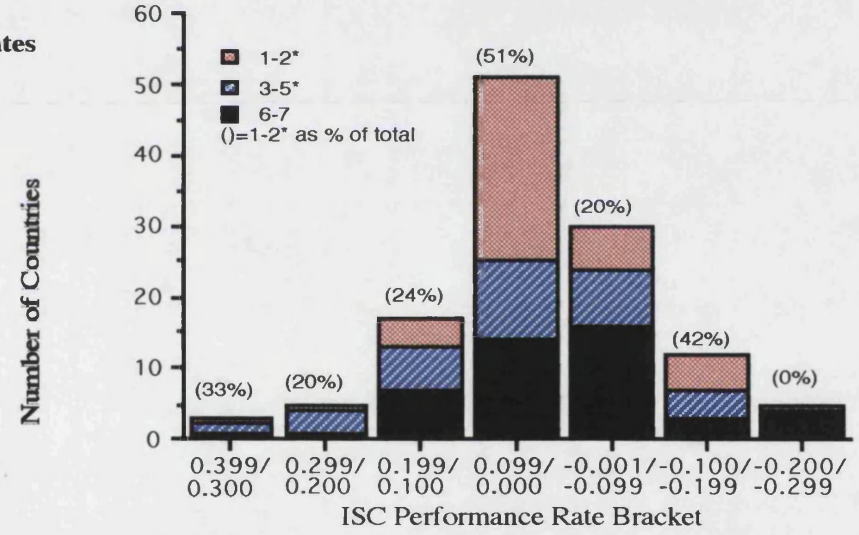
The overall improvements in I-HDI conditions are noted in graph (c). Most countries in the sample (71 of 123) displayed very slight I-HDI increases (0.000/0.099) during the period. Just under half of these states (31) were democracies; the vast majority of all democracies (72%) were located in this performance bracket. No democracy showed an improvement in the magnitude of 0.399/0.300; indeed, Indonesia and Egypt were the only

Fig. 5.2 Distribution Of Countries By Index Performance Rates and Levels Of Democracy, 1970-90

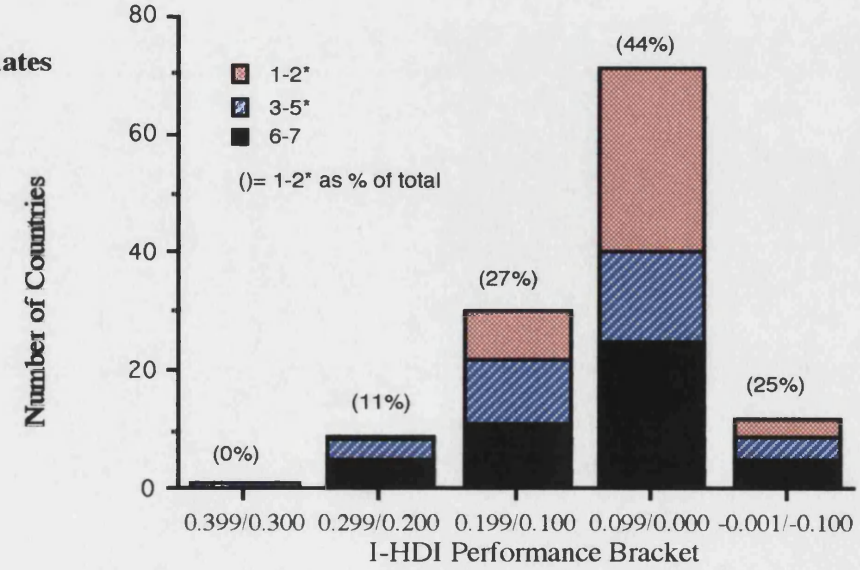
(a) HDI Rates



(b) ISC Rates



(c) I-HDI Rates



states in the sample with such increases (to be analyzed in Chapter 7). Principally due to its vastly improved ISC rate, Portugal was the only democracy (of 9 countries) in the next highest performance group (0.299/0.200). The three levels of democracy were fairly evenly represented at both the 0.199/0.100 and -0.001/-0.100 ranges; only three democracies (Iceland, El Salvador, and Peru) showed deteriorating conditions (negative I-HDI rates).

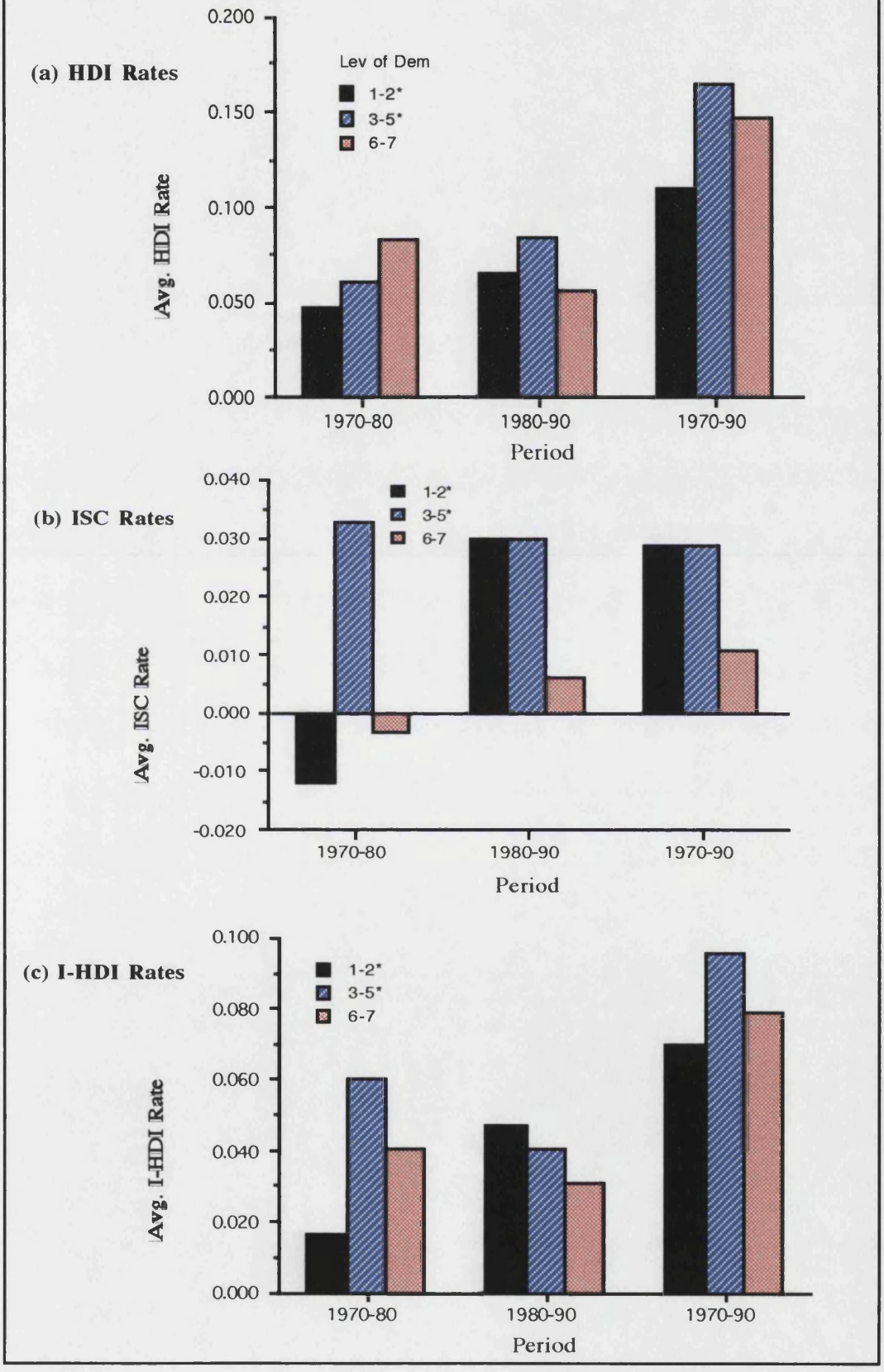
Three observations may be made on the basis of these results. First, regardless of index, a large majority of democracies tended to produce only 'modest' performance rates (0.099/0.000): 63% of all democratic states (43 for the period) displayed modest HDI rates, 60% displayed modest ISC rates, and 72% displayed modest I-HDI rates. Second, most countries - 73% for the HDI, 75% for the ISC, 90% for the I-HDI - in the top two performance brackets (0.399/0.300 and 0.299/0.200) had non-democratic LoD values. Third, and as a counterweight to the point just made, the vast majority of countries with negative performance rates - 36 of 47 (77%) for the ISC, 9 of 12 (75%) for the I-HDI - had non-democratic LoD values. In effect, over the course of this period, non-democratic states clustered at the two extremes - producing some very good, and some very poor, results - while democracies appeared to muddle through.

These distributional fluctuations are concealed by the *average* performance rates produced by each level of democracy. The advantage in employing this method is that more direct comparisons may be made on the basis of the relative performances of democratic and non-democratic states. Figure 5.3 (overleaf) illustrates the findings by index and period.

It would seem that democratic states, on the whole, did not fare well in terms of HDI performance rates (graph a). During the 1970-80 period, they displayed the lowest average HDI increase (0.047); a rate almost half that of the non-democratic (6-7) states (0.083). During the next period (1980-90), they posted a lower average rate (0.065) than the non-democratic (3-5*) states (0.085). Over the course of the two decades, democratic states recorded the lowest average HDI increase (0.110, compared to 0.164 for non-democratic (3-5*) states and 0.147 for non-democratic (6-7) states).

The picture looked better for the democratic states in terms of ISC rates (graph b). They performed (largely) on par with the non-democratic (3-5*) states (non-democratic (6-7) states displayed the worst rates). Given the volatile nature of ISC rates, where wild fluctuations in Security and Liberty values are common (especially among developing states), social improvements (positive rates) are sometimes immediately followed by social deteriorations (negative rates), thereby producing very incremental changes when averages are computed. Hence, while the democratic states produced a negative ISC rate (-0.012) in the 1970-80 period, the change was slight and roughly similar to the ISC decrease (-0.003) for the non-democratic (6-7) states (the non-democratic (3-5*) states posted a slight ISC increase of 0.033). In the other two periods, the democratic and non-democratic (3-5*) states exhibited identical average ISC increases: 0.030 in 1980-90 and 0.029 in 1970-90 (the rates for the non-democratic (6-7) states were 0.006 and 0.011).

Fig. 5.3 Average Index Performance Rates Per Level Of Democracy, 1970-90



The results for the democratic states were not very favourable in terms of I-HDI performance rates (graph c). In the first period (1970-80), their average increase (0.017) was somewhat less than the increases for the non-democratic (3-5*) states (0.060) and non-democratic (6-7) states (0.041). Democratic states did display the highest I-HDI increase in 1980-90 (0.047), though just fractionally ahead of the non-democratic (3-5*) states (0.041) and the non-democratic (6-7) states (0.031). Over the entire 1970-90 period, however, democratic states did a slightly poorer job of improving I-HDI values (with an average rate increase of 0.070, compared to 0.096 for the non-democratic (3-5*) states and 0.079 for the non-democratic (6-7) states).

Democratic states did not, on average, appear to improve human development conditions as well the non-democratic states during the period. In only one of the nine comparative cases did they display the highest index performance rate (I-HDI 1980-90); while, on the other hand, they produced the *lowest* average rate increases in five cases (HDI 1970-80, HDI 1970-90, ISC 1970-80, I-HDI 1970-80, I-HDI 1970-90). Another observation worth making is that the most authoritarian (LoD 6-7) states virtually never exhibited the highest performance rates. Comprised primarily of sub-Saharan countries, Middle Eastern autocracies, and Communist states, the non-democratic (6-7) states produced the highest average increase on only one occasion (HDI 1970-80). The non-democratic (3-5*) states displayed the highest average performance rates in five of the nine cases (HDI 1980-90, HDI 1970-90, ISC 1970-80, I-HDI 1970-80, I-HDI 1970-90) and shared the highest rate on two other occasions (ISC 1980-90, ISC 1970-90).

Furthermore, focusing specifically on the developing world, Table 5.2 shows that, on a fairly consistent basis, a greater proportion of non-democratic (3-5*) states surpassed the average performance rates for all developing states (N=88). The only exception applies to HDI rates, where the non-democratic (3-5*) and democratic states displayed similar records: 55% of non-democratic (3-5*) states performed above the developing average in 1970-80 (compared to 44% of democratic states); 40% produced above average rates in 1980-90 (62% for democratic states); and 41% produced above average rates in 1970-90 (47% for democratic states). However, a much larger proportion of non-democratic (3-5*) states surpassed the developing average for ISC rates: 60% in 1970-80; 72% in 1980-90; and 53% in 1970-90 (democratic states exhibited the lowest percentages for all three periods - 38%, 50% and 35%). Most significantly, the non-democratic (3-5*) states produced the highest proportion of above average I-HDI performers for all three dates (55%, 60% and 59%); whereas, for two of the three dates, democratic states had fewer above average performers, proportionally, than did the non-democratic (6-7) states.

Table 5.2 Percentage of 'Above Average' Performing Developing States By Level Of Democracy, Developing Threshold 1970-90

LoD	HDI 1970-1980	HDI 1980-1990	HDI 1970-1990	ISC 1970-1980	ISC 1980-1990	ISC 1970-1990	I-HDI 1970-1980	I-HDI 1980-1990	I-HDI 1970-1990
1-2*	44%	62	47	38	50	35	25	50	35
3-5*	55	40	41	60	72	53	55	60	59
6-7	40	22	35	52	59	49	44	41	41

Note. The average performance rates for all developing states were, by period (1970-80, 1980-90, 1970-1990): 0.075, 0.079 and 0.155 for the HDI; -0.009, 0.022, and 0.013 for the ISC; and 0.033, 0.051 and 0.084 for the I-HDI.

The evidence presented in this section contradicts the argument that democracies are vital to human development performance. But these general comparisons are still premature, for as the next section will demonstrate, one crucial factor must be taken into account before more definitive conclusions can be drawn.

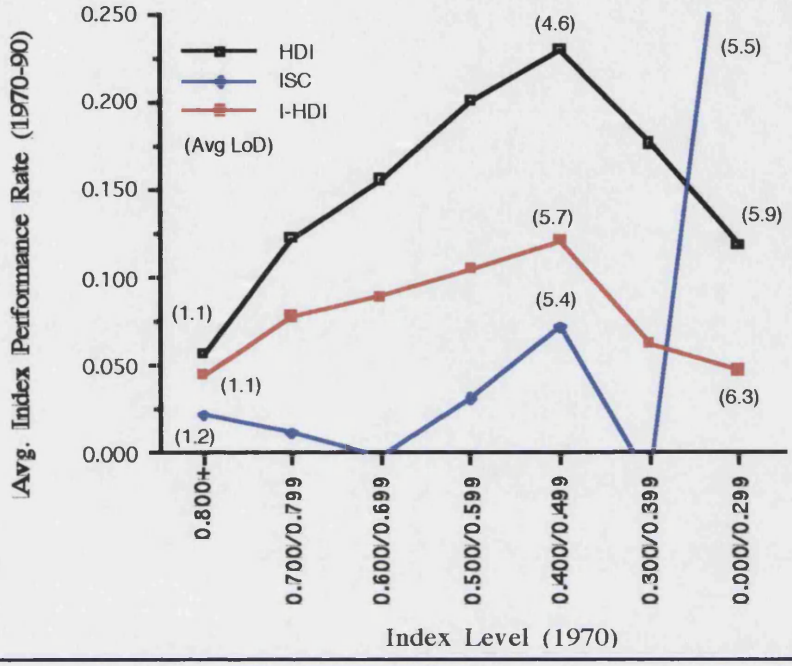
5.2 Controlling For Levels of Human Development

Levels and Rates of Human Development: An Overview

The fundamental problem with studying general performance rates in isolation, as was done above, is that countries are compared without regard to their levels of development at the beginning of the period in question. Hence, the rate increases for developed states are indiscriminately compared to those for developing states, although they are starting from altogether dissimilar developmental plateaus. Developing states have more room to improve, in absolute terms, on the fixed index scales than developed, typically democratic, states. It is more useful, and conceptually valid, to therefore compare the performance rates of countries starting from similar levels of human development. If index levels are not first controlled for, democratic states are at a distinct and unfair disadvantage.

Figure 5.4 depicts the relationship between the levels and rates of human development by tracing the average performance rates (1970-90) for countries beginning the period at similar index levels. Noted in parenthesis are the average LoD values found at the highest and lowest index levels, and at the index levels showing the greatest rate increases.

Fig. 5.4 Levels and Rates of Human Development In Perspective, 1970-90



The line charting the course of HDI performance rates almost resembles an inverted 'U', rising steadily from its lowest point at the 0.800+ level up to the middle range of HDI values (peaking at the 0.400/0.499 level), and then gradually declining thereafter. This basic pattern is mirrored by I-HDI rates. In both cases, countries located at the mid-index levels produced the highest average rate increases over the period: 0.230 (0.400/0.499) and 0.200 (0.500/0.599) for the HDI; 0.121 (0.400/0.499) and 0.104 (0.500/0.599) for the I-HDI. As shown in Chapter 4, democratic states are more of a rarity at these index levels, a point confirmed by the non-democratic LoD averages (4.6 and 5.7) at the peak performance levels.

Largely concentrated at the 0.800+ levels (LoD averages of 1.1 for both indices), where rate increases tended to be comparatively small (0.056 for the HDI and 0.045 for the I-HDI), most democratic states displayed modest performance rates over this period because *they were already 'developed'* to begin with. For this reason, when aggregate rates are compared without any reference to levels of human development (as was done earlier in Figures 5.2 and 5.3), the illusion is created that democratic states display 'poor' results.

Relatively low performance rates were also found at the other extreme of the index scales, where the most underdeveloped (largely sub-Saharan) states resided. These societies lacked the means and resources, material and otherwise, to develop at sufficiently higher

rates (the HDI and I-HDI performance rates for the 0.000/0.299 levels were 0.118 and 0.047). Strongly authoritarian LoD averages were observed at these levels (5.9 and 6.3).

The patterns are considerably more erratic for the ISC. The line representing ISC performance rates dips into the negative range at two levels (0.600/0.699 and 0.300/0.399), indicating that many countries had experienced deteriorating social conditions by 1990 (with average ISC decreases of -0.003 and -0.016, respectively). The line proceeds well beyond the limits of the scale at the 0.000/0.299 level because of the extraordinary ISC increase of Indonesia (0.382), the only country found here (the ISC rates observed at this level during the other periods were inconsistent: 0.150 for 1970-80 and -0.070 for 1980-90). At the highest ISC level (0.800+), where democracies were largely concentrated (avg. LoD of 1.2 for the period), the average ISC rate increase was predictably modest (0.022).

To summarize, setting aside the findings for the ISC (which, given the nature of its composition, is bound to be entirely unpredictable),[2] the highest average performance rates are typically produced by countries at mid-index levels, while the lowest rates are produced by countries at either end of the index scales (albeit for different reasons). Given that democracies are overwhelmingly found at higher index levels, they are therefore much more likely to improve their index values in smaller increments. These findings were confirmed for the two shorter periods as well.[3]

Controlling For Levels of Human Development: The Evidence, 1970-90

When index levels are controlled for, little separates the levels of democracy in terms of human development performance. In the analysis to follow, countries have been divided into three broad levels - High (0.800+), Medium (0.799/0.500), and Low (0.499/0.000) - according to how developed they were at the beginning of the performance period, and grouped according to their respective LoD values. The average rate increase for each level of democracy was then calculated.

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[2]As previously mentioned, the seemingly ad hoc pattern of ISC performance rates reflects the reality of social conditions, as defined by my chosen measure. ISC rates represent not necessarily 'development', in the traditional understanding of the term as more or less steady progress, but 'shifts', highly volatile and reversible trends. Fluctuations in the ISC's constituent indices may change a country's ISC level literally overnight: a sudden outbreak of war may plunge a country's SEC value (and with it, its ISC value), just as the decision of a ruling regime to either restore or withdraw basic civil liberties will dramatically affect that country's LIB (and therefore ISC) value. This volatility is primarily confined to developing states, although the disintegration of Yugoslavia serves as a vivid reminder that even more developed states are not immune.

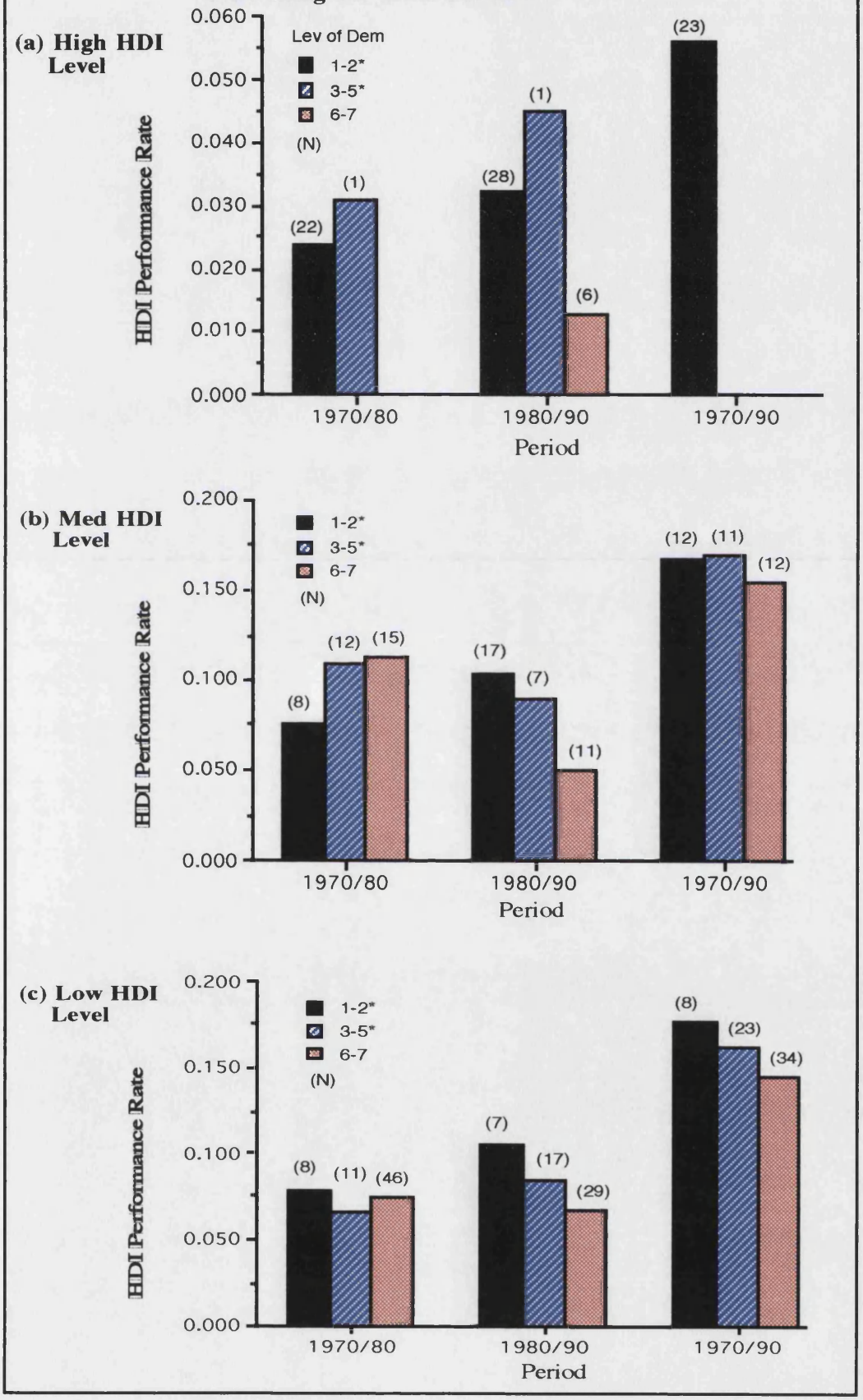
[3]In the 1970-80 and 1980-90 periods, the highest average HDI and I-HDI performance rates were produced at the mid-range of index values (0.400-0.699). Specifically, for both periods, the highest HDI rates (0.127 and 0.128) were found at the 0.400-0.499 levels, while the highest I-HDI rates (0.068 and 0.081) were found at the 0.600-0.699 levels (although there was very little separating the three mid-range levels). For both periods, the lowest average HDI and I-HDI rates were recorded for countries at either end of the two scales (i.e., for the most developed (democratic) states and the least developed (authoritarian) states).

Figure 5.5 (overleaf) illustrates the average HDI performance rates by level of democracy, controlling for similar HDI levels. At the High HDI Level, as was noted in the previous chapter, the vast majority of states were OECD democracies. In the 1970/80 period, the 22 democracies exhibited a slightly lower average HDI increase (0.024) than the sole non-democratic (3-5*) state, Spain (0.031). In the next period, the 28 democracies produced a lower average HDI increase (0.032) than the sole non-democratic (3-5*) state, Hong Kong (0.045); the six Communist states (Hungary, Poland, USSR, Czechoslovakia, Bulgaria and GDR) had a paltry average rate (0.013). With Spain becoming a democracy, all 23 countries found at the High HDI Level in 1970 displayed democratic LoD values over the entire 1970/90 period; the average HDI rate increase was predictably modest (0.057).

The fairly even distribution of countries at the Medium HDI Level allows for more satisfactory comparisons. With an average HDI increase of 0.112 in the 1970/80 period, the non-democratic (6-7) states slightly edged out the non-democratic (3-5*) states (0.109), but greatly surpassed the democratic states (0.076). In the 1980/90 period, however, this pattern was reversed: the democratic states produced the highest average rate (0.103), followed by the non-democratic (3-5*) states (0.090) and the non-democratic (6-7) states (0.050). Over the 1970-90 period, there was very little to separate the levels of democracy: the democratic states and the non-democratic (3-5*) states produced virtually the same average increases (0.167 and 0.169), with the non-democratic (6-7) states not far behind (0.154).

The Low HDI Level contained a disproportionately high number of strongly authoritarian (6-7) states (primarily from the sub-Saharan group). Nevertheless, it is interesting to note that the democratic states exhibited the highest performance rate for all three periods. In the 1970/80 period, the average increase for the democratic states (0.079) was slightly above the rates for the non-democratic (3-5*) and non-democratic (6-7) states (0.074 and 0.066, respectively). The gap in performance rates widened in the next period (1980/90): the seven democratic states produced by far the highest average rate (0.105, compared to 0.085 for the non-democratic (3-5*) states and 0.067 for the non-democratic (6-7) states). The average HDI increase for the democratic states (0.177) over the entire 1970/90 period was greater than the increases for the non-democratic (3-5*) and non-democratic (6-7) states (0.162 and 0.145).

Fig. 5.5 Levels of Democracy and HDI Performance Rates, Controlling For Index Levels



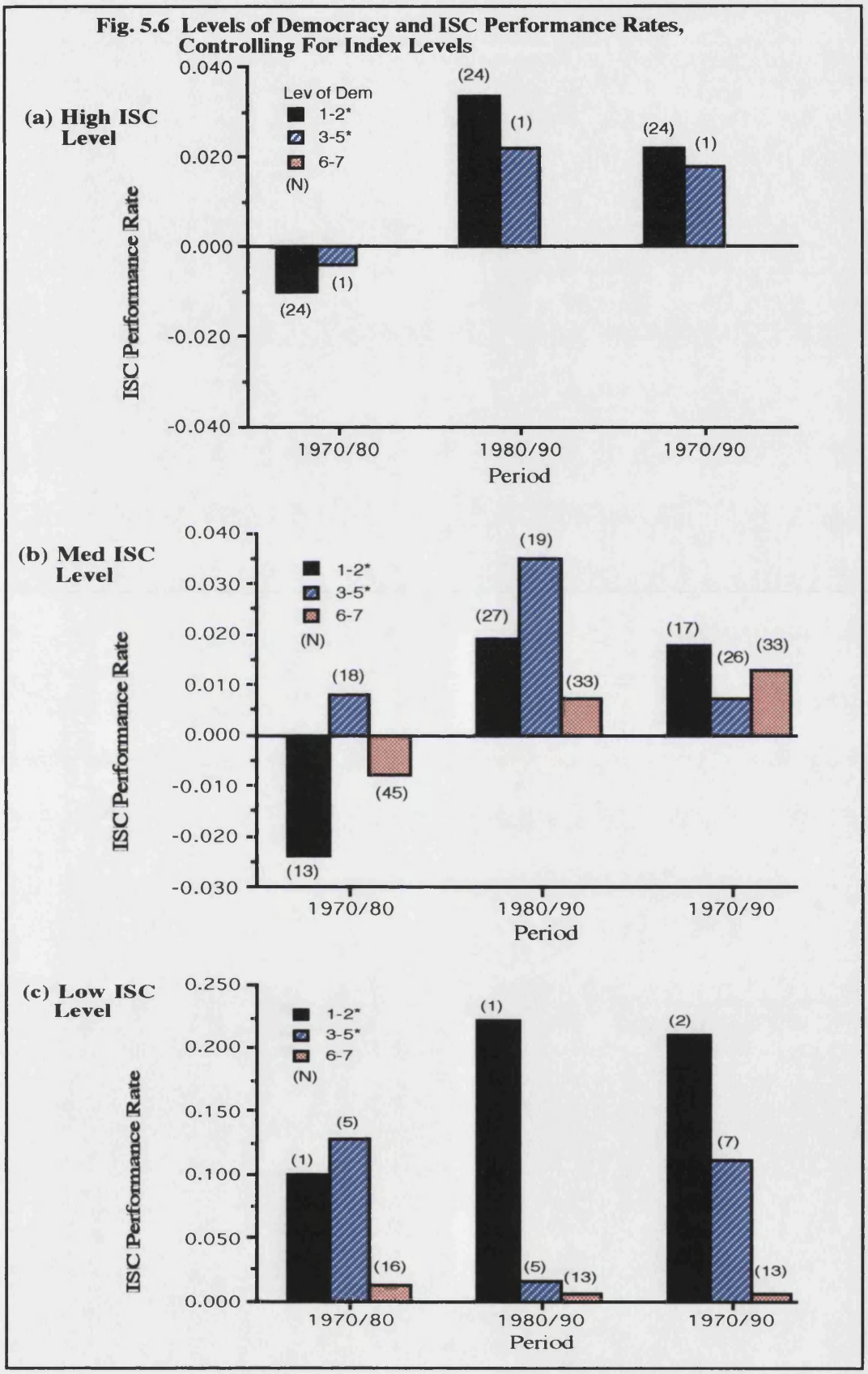
In effect, when HDI Levels were controlled for, no level of democracy consistently produced the highest average performance rates; the rate gaps tended to be very modest, especially over the entire 1970-90 period. Democratic states performed basically as well at the High and Medium HDI Levels as the non-democratic states, and slightly better at the Low HDI Level (although even here the differences were not pronounced).

Figure 5.6 (overleaf) presents the findings relating to ISC performance rates and levels of democracy, controlling for ISC levels. At the High ISC Level, there was an acute distributional imbalance for all three periods: the only non-democratic case was Hong Kong (3-5*). In the 1970-80 period, slightly deteriorating social conditions were observed for the (largely OECD) democracies (-0.010) and for Hong Kong (-0.004). Social conditions improved during the 1980/90 period, with the democratic states exhibiting an average ISC increase of 0.034, compared to Hong Kong's increase of 0.022. The very modest average ISC increases were indistinguishable over the 1970/90 period (0.022 and 0.018).

There was a more even distribution at the Medium ISC Level, where more than half of the total number of countries in the sample were concentrated. In the 1970-80 period, the democratic states experienced the largest average ISC decrease (-0.024), whereas the non-democratic (3-5*) states displayed a negligible rate increase (0.008) and the non-democratic (6-7) states had a slight decrease (-0.008). The non-democratic (3-5*) states also exhibited the largest average ISC increase during 1980/90 (0.035, compared to 0.019 for the democratic states and 0.007 for the non-democratic (6-7) states). Despite showing better rates in the two shorter periods, the non-democratic (3-5*) states actually produced the lowest average ISC increase (0.007) over the entire 1970/90 period (the democratic and non-democratic (6-7) states had similar increases, 0.018 and 0.013). All three average rate increases were, however, very slight.

There were fewer countries in general, and democracies in particular, at the Low ISC Level. The ISC increase (0.099) for the single democratic state (India) found at this level in the 1970/80 period was less than the average increase (0.129) for the five non-democratic (3-5*) states; the average increase for the non-democratic (6-7) states was negligible (0.013). During the 1980/90 period, the single democratic state (Argentina) produced an extraordinary ISC increase (0.222) - principally due to its increased LIB value (with the restoration of civil liberties upon its return to democratic rule) - which dwarfed the average increases for the non-democratic (3-5*) and non-democratic (6-7) states (0.015 and 0.007, respectively). Over the 1970-90 period, the dramatic ISC increase shown by Portugal (0.329) - also due in part to its increased LIB value following the establishment of democratic rule - coupled with the modest increase for India (0.091), ensured that the average ISC rate increase for the two democratic states (0.210) was considerably greater than the rate increases for the non-democratic (3-5*) and non-democratic (6-7) states (0.111 and 0.006, respectively).

Fig. 5.6 Levels of Democracy and ISC Performance Rates, Controlling For Index Levels



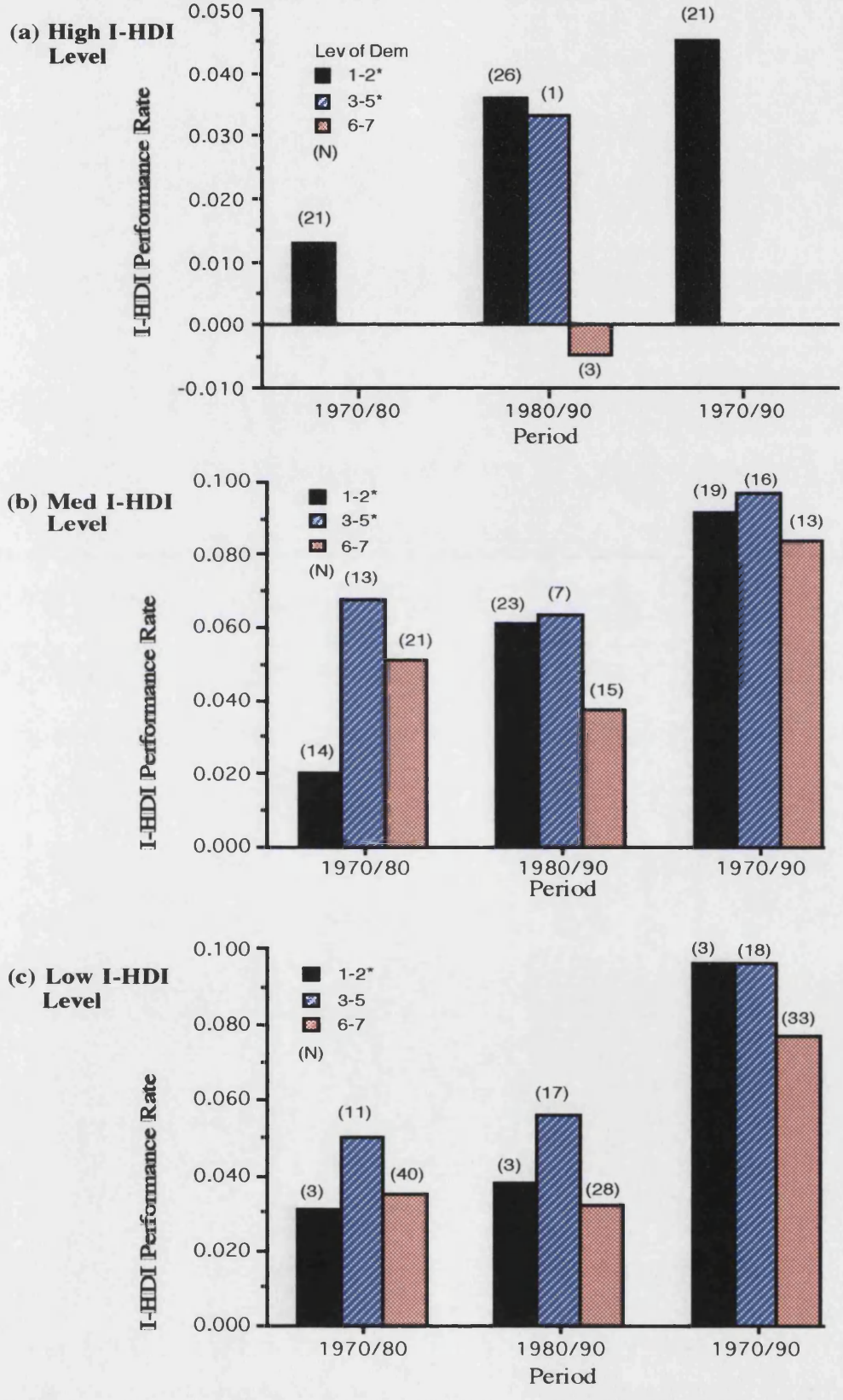
The lack of non-democratic states at the High ISC Level, and the extremely few democratic states at the Low ISC Level, suggests that the findings for these two ISC levels should be kept in perspective. The distribution of countries may have been more even at the Medium ISC Level, but the results were also inconclusive: while the non-democratic (3-5*) states showed the greatest average ISC increases in the shorter periods, the rate differences were not large, and were offset by the greater ISC increase over the longer 1970/90 period for the democratic states (again, the differences here were not great).

The illustrations in Figure 5.7 (overleaf) depict the relationship between levels of democracy and I-HDI performance rates, controlling for I-HDI Levels. Only democratic states were observed at the High I-HDI Level during the 1970/80 and 1970/90 periods. They displayed an average I-HDI performance rate of 0.013 in the 1970/80 period, indicating a somewhat modest improvement in overall human development conditions. In the 1980-90 period, the average I-HDI increase for the 26 democracies (0.036) was slightly greater than that for Hong Kong (0.033); the three Communist states (Poland, Czechoslovakia, and GDR) located at this level in 1980 witnessed an almost negligible decline (-0.005) in their collective fortunes by 1990. The 21 democracies which began the 1970/90 period at this level showed a modest average I-HDI increase of 0.045.

At the Medium I-HDI Level, the democratic states exhibited the second highest average increase for two periods, and the lowest increase for the other. The gaps between the democratic and non-democratic states were fairly pronounced in the 1970/80 period: the average I-HDI increase for the democratic states (0.020) was well below the average rates for the non-democratic (3-5*) and non-democratic (6-7) states (0.068 and 0.051, respectively). But in the 1980/90 period, the democratic states posted a fractionally smaller average increase (0.061) than the non-democratic (3-5*) states (0.064), with the non-democratic (6-7) states well behind (0.037). The non-democratic (3-5*) states showed the highest I-HDI increase (0.097) over the 1970-90 period, just slightly ahead of the democratic states (0.092) and the non-democratic (6-7) states (0.084).

At the Low I-HDI Level, the patterns for the two shorter periods were consistent. During 1970-80, the average I-HDI increase for the non-democratic (3-5*) states (0.050) was greater than the average increases for the non-democratic (6-7) states (0.035) and the three (India, Gambia, and Guatemala) democratic states (0.031). The non-democratic (3-5*) states also produced the highest average I-HDI increase in the 1980/90 period (0.056, compared to 0.038 for the democratic states and 0.032 for the non-democratic (6-7) states). Over the entire 1970/90 period, the average rate increases for the democratic and non-democratic (3-5*) states were identical (0.096); the non-democratic (6-7) states showed the smallest period increase (0.077).

Fig. 5.7 Levels of Democracy and I-HDI Performance Rates, Controlling For Index Levels



These findings are therefore ambiguous. The results for the High I-HDI Level are of no comparative value given the almost exclusive presence of democratic states. At the Medium I-HDI Level, the non-democratic (3-5*) states exhibited the highest rate increases for all three periods. But since their average rates exceeded those for the democratic states by only 0.003 (1980/90) and 0.005 (1970/90), it would be closer to the truth to declare a 'tie' between the two. Likewise, one should be wary of any generalizations at the Low I-HDI Level: the non-democratic (3-5*) and democratic states had almost identical average I-HDI increases over the 1970/90 period (although the non-democratic (3-5*) states had larger increases over the two shorter periods).

Across the three indices, it is only at the Medium levels (0.500-0.799) where meaningful comparisons can be made, given the fairly even distribution of countries by level of democracy. It has been shown that the results here have tended to favour the non-democratic (3-5*) states, but only barely. They produced the highest average rate increases in six of the nine cases: HDI 1970-90; ISC 1970-80; ISC 1980-90; I-HDI 1970-80; I-HDI 1980-90; and I-HDI 1970-90. It will be recalled, however, that the non-democratic (3-5*) states and the democratic states effectively 'tied' in three of these cases - HDI 1970-90, I-HDI 1980-90 and I-HDI 1970-90; in one other case (HDI 1970-80), the non-democratic (3-5*) states were barely surpassed by the non-democratic (6-7) states.

The performance of democratic states, on the other hand, varied distinctively by period. They produced by far the worst average HDI, ISC and I-HDI rates over the 1970/80 period. The situation changed in 1980-90, when they produced the highest average HDI increase and the second highest ISC and I-HDI increases (behind the non-democratic (3-5*) states, though barely so in the latter case). Over the course of the 1970-90 period, the democratic states fell only slightly short of the average HDI and I-HDI increases produced by the non-democratic (3-5*) states, but displayed the highest ISC increase (although the differences between all three levels of democracy were small). Examining the corresponding average *percentage increases* over the entire period (Table 5.3), it becomes evident just how little separated the LoD groups.[4]

Table 5.3 Percentage Increases (1970-90) By Level Of Democracy, Medium Index Levels

LoD	Average Percentage Increases, 1970-90		
	Med HDI	Med ISC	Med I-HDI
1-2*	26.3%	2.7%	14.1%
3-5*	27.0%	1.2%	15.9%
6-7	23.2%	2.1%	12.8%
N(1-2*,3-5*,6-7)= 12,11,12 for HDI; 17,26,33 for ISC; 19, 16, 13 for I-HDI.			

[4]Avg.% Increase(1970-90) = Avg. Absolute Increase(1970-90) / Avg. Level (1970).

Democratic states produced average HDI increases of 26.3% above their 1970 levels, meaning that the average level of individual capabilities rose by just over one-quarter by 1990. This percentage increase was barely surpassed by the non-democratic (3-5*) states (27.0%), with the non-democratic (6-7) states not far behind (23.2%). The average ISC percentage increases were miniscule for all three levels of democracy (1.2-2.7%), a phenomenon attributable to the unpredictable rate fluctuations of this index. The I-HDI percentage increases also fell within a narrow range, with overall human development conditions improving by an average of 12.8-15.9% by 1990.

There is another key point to consider. It was shown earlier that, in the absence of controlling variables, the average levels of democracy associated with the various performance-rank groups were largely indistinguishable (Figure 5.1); in other words, no single level of democracy was predominant among either the best or worst sets of performers. The same may be observed specifically at the Medium index levels. The average levels of democracy for the top 10 and bottom 10 performing states over the 1970-90 period were virtually identical. These averages hovered around the mid-point of the LoD scale (3.0-4.0), confirming that democratic and non-democratic states were present in (largely) equal measure (Table 5.4).

Table 5.4 The Best/Worst Performing States (1970-90) Beginning From Medium Index Levels (1970)

(a) HDI				(b) ISC				(c) I-HDI			
Lev Rank	Country	Increase 1970-90	LoD 70-90	Lev Rank	Country	Increase 1970-90	LoD 70-90	Lev Rank	Country	Increase 1970-90	LoD 70-90
1.	S. Korea	0.336	4.1	1.	S. Korea	0.237	4.1	1.	Portugal	0.290	1.6
2.	Yugoslavia	0.280	6.4	2.	Spain	0.224	1.6	2.	S. Korea	0.287	4.1
3.	Colombia	0.259	2.1	3.	UAE	0.203	5.4	3.	Thailand	0.223	4.4
4.	Mauritius	0.254	2.2	4.	Chile	0.199	6.3	4.	UAE	0.186	5.4
5.	Portugal	0.250	1.6	5.	Greece	0.190	1.8	5.	Chile	0.183	6.3
6.	Brazil	0.249	4.2	6.	Cyprus	0.158	1.9	6.	Greece	0.171	1.8
7.	Saudi Arab	0.231	6.6	7.	Czech.	0.143	6.8	7.	Malaysia	0.163	2.6
8.	Malta	0.228	1.5	8.	USA	0.126	1.0	8.	Cyprus	0.149	1.9
9.	Panama	0.224	5.3	9.	Egypt	0.125	6.0	9.	Spain	0.146	1.6
10.	Costa Rica	0.201	1.0	10.	Thailand	0.114	4.4	10.	Albania	0.142	7.0
	Avg LoD		*3.5*		*Avg LoD*		*3.9*		*Avg LoD*		*3.5*
26.	Czech.	0.126	6.8	67.	Colombia	-0.101	2.1	39.	Sri Lanka	0.024	1.8
27.	Kuwait	0.125	6.1	68.	Myanmar	-0.105	7.0	40.	USSR	0.021	6.7
28.	Peru	0.114	2.8	69.	Sri Lanka	-0.111	1.8	41.	Yugoslavia	0.017	6.4
29.	Argentina	0.105	3.2	70.	Mexico	-0.145	3.3	42.	Venezuela	0.013	1.1
30.	Uruguay	0.097	3.0	71.	Peru	-0.147	2.8	43.	South Africa	0.013	5.3
31.	Venezuela	0.092	1.1	72.	Iran	-0.148	5.7	44.	Kuwait	0.012	6.1
32.	Jamaica	0.087	1.9	73.	Sierra L.	-0.155	5.6	45.	Mexico	0.009	3.3
33.	Cuba	0.084	6.8	74.	El Salvador	-0.162	2.6	46.	Peru	-0.016	2.6
34.	Trinidad&T.	0.066	1.8	75.	Nicaragua	-0.204	4.0	47.	El Salvador	-0.021	2.6
35.	South Africa	0.059	5.3	76.	Yugoslavia	-0.247	6.4	48	Nicaragua	-0.041	4.0
	Avg LoD		*3.9*		*Avg LoD*		*4.1*		*Avg LoD*		*3.9*

The top 10 HDI performers displayed an average LoD value of 3.5 for the period, compared to an almost identical average of 3.9 for the bottom 10 performers. There were five democratic states (Colombia, Mauritius, Portugal, Malta and Costa Rica) among the top 10 performers, counterbalanced by four democratic states (Peru, Venezuela, Jamaica, Trinidad and Tobago) among the bottom 10 performers. The differences between the top and bottom ISC performance groups were even more miniscule (LoD averages of 3.9 and 4.1). There were four democratic states (Spain, Greece, Cyprus and the USA) among the top 10 performers and four democratic states (Colombia, Sri Lanka, Peru and El Salvador) among the bottom 10 performers. Such parity was also observed for the I-HDI performance groups, where the average LoD values were 3.7 (top 10) and 4.0 (bottom 10). There were five democratic states (Portugal, Greece, Malaysia, Cyprus and Spain) among the top 10 I-HDI performers and four democratic states (Sri Lanka, Venezuela, Peru and El Salvador) among the bottom 10 performers. Quite clearly, the best and worst performers could not, on average, be distinguished by levels of democracy.

There is one final basis of comparison to be established. Specifically regarding the developing world, how do states within each level of democracy fare against the 'index level threshold', the average rate increase for all states at similar levels of human development? To answer this question, states were initially evaluated according to whether or not they surpassed their respective threshold averages.[5] The number of states with 'above average' rates within each level of democracy was then added up and calculated as a percentage of the total. The findings are presented in Table 5.5.

Table 5.5 Percentage of 'Above Average' Performing Developing States By Level Of Democracy, Index Level Threshold (1970-90)

	HDI			ISC			I-HDI		
LoD	1970-1980	1980-1990	1970-1990	1970-1980	1980-1990	1970-1990	1970-1980	1980-1990	1970-1990
1-2*	19%	58	41	25	46	35	31	50	41
3-5*	45	56	47	50	60	50	50	60	47
6-7	44	46	39	44	54	49	42	43	35

Note. The average HDI rates for each index level (TP1 to TP7, see footnote 5 for details) were: 0.025, 0.088, 0.106, 0.112, 0.127, 0.082 and 0.049 for 1970/80; 0.029, 0.048, 0.103, 0.102, 0.128, 0.085 and 0.054 for 1980/90; and 0.056, 0.123, 0.156, 0.200, 0.230, 0.176 and 0.118 for 1970/90. The ISC averages per level were: -0.010, 0.011, -0.016, -0.006, 0.060, -0.005 and 0.150 for 1970/80; 0.033, 0.007, 0.012, 0.026, 0.055, 0.023 and -0.070 for 1980/90; and 0.022, 0.011, -0.003, 0.031, 0.072, -0.016 and 0.382 for 1970/90. The I-HDI avgs per level were: 0.013, 0.033, 0.068, 0.042, 0.056, 0.025 and 0.022 for 1970/80; 0.032, 0.005, 0.081, 0.069, 0.060, 0.032 and -0.013 for 1980/90; 0.045, 0.078, 0.089, 0.104, 0.121, 0.062 and 0.047 for 1970/90.

[5]The index levels have been divided into a series of very specific 'take-off' points' (TPs). Instead of three levels (High 0.800+, Med 0.500/0.799, and Low 0.000/0.499), seven are used here: 0.800+ (TP1); 0.700/0.799 (TP2); 0.600/0.699 (TP3); 0.500/0.599 (TP4); 0.400/0.499 (TP5); 0.300/0.399 (TP6); and 0.000/0.299 (TP7). The averages per level and index are given in Table 5.5 ('Note').

Only 19% (3 of 16) of developing democracies produced HDI increases over the 1970-80 period greater than their respective threshold averages (i.e., the average increases produced by all states starting from similar HDI levels in 1970); in contrast, 45% of all non-democratic (3-5*) states and 44% of all non-democratic (6-7) states produced 'above average' HDI increases for the period. On the whole, democratic states performed as well as the non-democratic (6-7) states, but not the non-democratic (3-5*) states. In only one of the nine cases (HDI 1980-90) did the democratic group contain the highest percentage of above average states (surpassing the figure for the non-democratic (3-5*) states by just 2%); this, incidentally, was the only case where the non-democratic (3-5*) states *did not* produce the highest percentage. Moreover, on just one other occasion (I-HDI 1980-90) did the majority of democratic states exceed their respective threshold averages; the majority of non-democratic (3-5*) states did so on six occasions. In five cases, the democratic group actually contained the fewest states, proportionally, with above average rate increases: once for the HDI (1970-80), all three periods for the ISC, and once for the I-HDI (1970-80).

These records may be analyzed by period. In the 1970-80 period, democratic states did not compare favourably against either of the two non-democratic LoD groups. In the 1980-90 period, democratic states fared well in terms of HDI increases, but less so on the basis of ISC and I-HDI increases (although, it should be noted, the differences between the levels of democracy were not pronounced). Significantly, democratic and non-democratic (3-5*) states had virtually identical records over the longer 1970-90 period for both the HDI and I-HDI.

The findings in this section suggest that when human development levels are controlled for, generalizations regarding levels of democracy and human development performance cannot be substantiated. Over the 1970-90 period, no level of democracy consistently displayed the highest average increases for all three indices and across all three index levels (High, Medium and Low). At most, it could be argued that the non-democratic (3-5*) states produced (marginally) better average increases at the only range of index values where meaningful comparisons could be made (the Medium Level), although the average LoD values between the best and worst performers were indistinguishable. Non-democratic (3-5*) states did produce better records against their respective threshold averages, but not by much over the entire period.

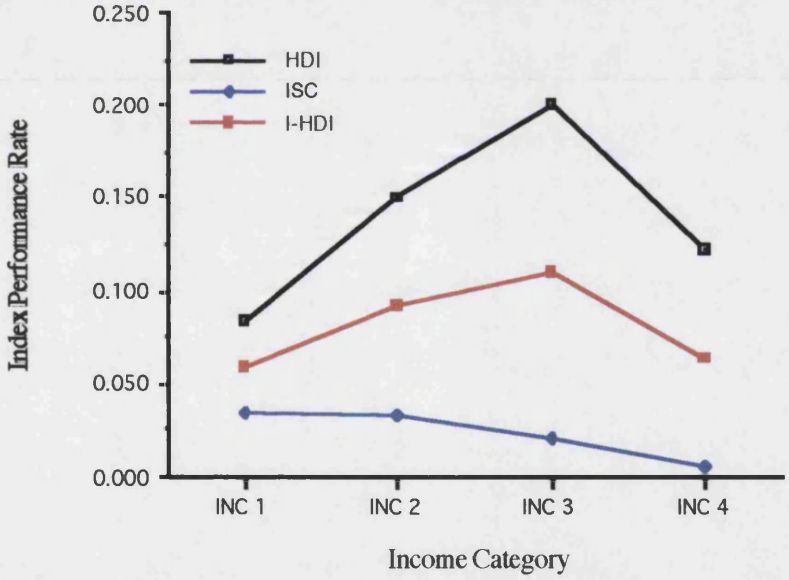
5.3 Controlling For Levels of Economic Development

This section will examine whether a clearer picture emerges if levels of economic development (national income) are controlled for. As was done in Chapter 4, the GDP/C variable is used to divide states into one of four income categories, from the richest (INC 1) to the poorest (INC 4) group, according to their respective GDP/C rankings at the

beginning of the performance period in question: R1-30 (INC 1), R31-60 (INC 2), R61-90 (INC 3), R91-123 (INC 4).[6]

It is interesting to note that, as with index levels, average performance rates tend to vary from one income level to the next. In other words, where a country sits along the income scale may provide a clue as to the potential magnitude of its rate increase. This is not surprising since there is a strong relationship between levels of economic development and human development (section 4.2 in Chapter 4), and given the results of the previous section. In fact, the patterns produced when human development increases are traced across levels of economic development (Figure 5.8) mirror, to a remarkable extent, those produced across levels of human development (Figure 5.4 above).

Fig. 5.8 Human Development Performance and Levels Of Economic Development, 1970-90



Notes. The actual performance rates from INC 1 to INC 4 are: for the HDI, 0.084, 0.150, 0.200, 0.122; for the ISC, 0.034, 0.033, 0.020, 0.005; and for the I-HDI, 0.059, 0.092, 0.110, 0.064.

Inverted 'U' patterns were found for HDI and I-HDI performance rates over the 1970-90 period. On average, countries located in the middle income categories (INC 2 and INC 3) produced the highest HDI and I-HDI performance rates, while the lowest rates were produced by countries at either end of the income scale (INC 1 and INC 4). The pattern for ISC performance rates was, once again, altogether different. But rather than the erratic, zigzag pattern observed in Figure 5.4, the line here follows a more definitive route: the

[6]The range of GDP/C values for each income category was given in Chapter 4 (footnote 11).

highest average ISC rate was produced by the INC 1 category, with steadily declining rates thereafter. Hence, on average, the richest countries tended to improve social conditions the most, while the poorest countries improved the least.

Controlling For Levels of Economic Development: The Evidence, 1970-90

Does the level of democracy have any direct impact on human development performance rates for countries at similar levels of economic development? Table 5.6 presents the average HDI, ISC and I-HDI performance rates by level of democracy for three periods, after controlling for economic development. Upon initial inspection, it certainly might appear that democratic states do not fare well when economic development is employed as the discriminating variable. Of the 36 comparative cases listed, democratic states produced the highest average performance rate on only *four* occasions. In particular, they displayed the highest average HDI rates twice (INC 3 1980/90, INC 4 1980/90), the highest average ISC rate once (INC 2 1970/90), and the highest average I-HDI rate once (INC 2 1970/90).

Table 5.6 Average Human Development Rates By Level Of Democracy, Controlling For Economic Development

Inc Cat	LoD	HDI Rates 1970/80	1980/90	1970/90	ISC Rates 1970/80	1980/90	1970/90	I-HDI Rates 1970/80	1980/90	1970/90
INC 1	1-2*	0.025	0.033	0.060	0.004	0.043	0.035	0.015	0.038	0.048
	3-5*	0.114	0.048	0.170	0.101	0.045	0.203	0.108	0.047	0.186
	6-7	0.140	0.055	0.161	0.006	0.005	-0.001	0.073	0.030	0.080
INC 2	1-2*	0.067	0.070	0.137	-0.024	0.039	0.080	0.022	0.054	0.109
	3-5*	0.090	0.086	0.149	0.054	0.051	0.002	0.072	0.068	0.075
	6-7	0.104	0.023	0.164	-0.017	0.004	0.024	0.046	0.013	0.094
INC 3	1-2*	0.089	0.115	0.206	-0.055	0.012	-0.036	0.017	0.064	0.085
	3-5*	0.093	0.106	0.182	-0.033	0.026	0.005	0.030	0.066	0.093
	6-7	0.096	0.113	0.222	0.026	0.078	0.107	0.061	0.096	0.164
INC 4	1-2*	0.042	0.089	0.118	0.034	-0.038	0.028	0.038	0.025	0.073
	3-5*	0.063	0.065	0.157	0.042	0.015	0.078	0.053	0.040	0.118
	6-7	0.049	0.056	0.108	-0.014	-0.013	-0.027	0.018	0.021	0.041

On the other hand, democratic states produced the *lowest* average performance rate in just over *half* of all the comparative cases listed (19 of 36). This dubious record was spread across all levels: they produced the lowest average HDI rate increase for all income categories in the 1970/80 period, for the INC 1 category in 1980/90, and for two income categories in the 1970/90 period (INC 1 and INC 2); they produced the lowest average ISC

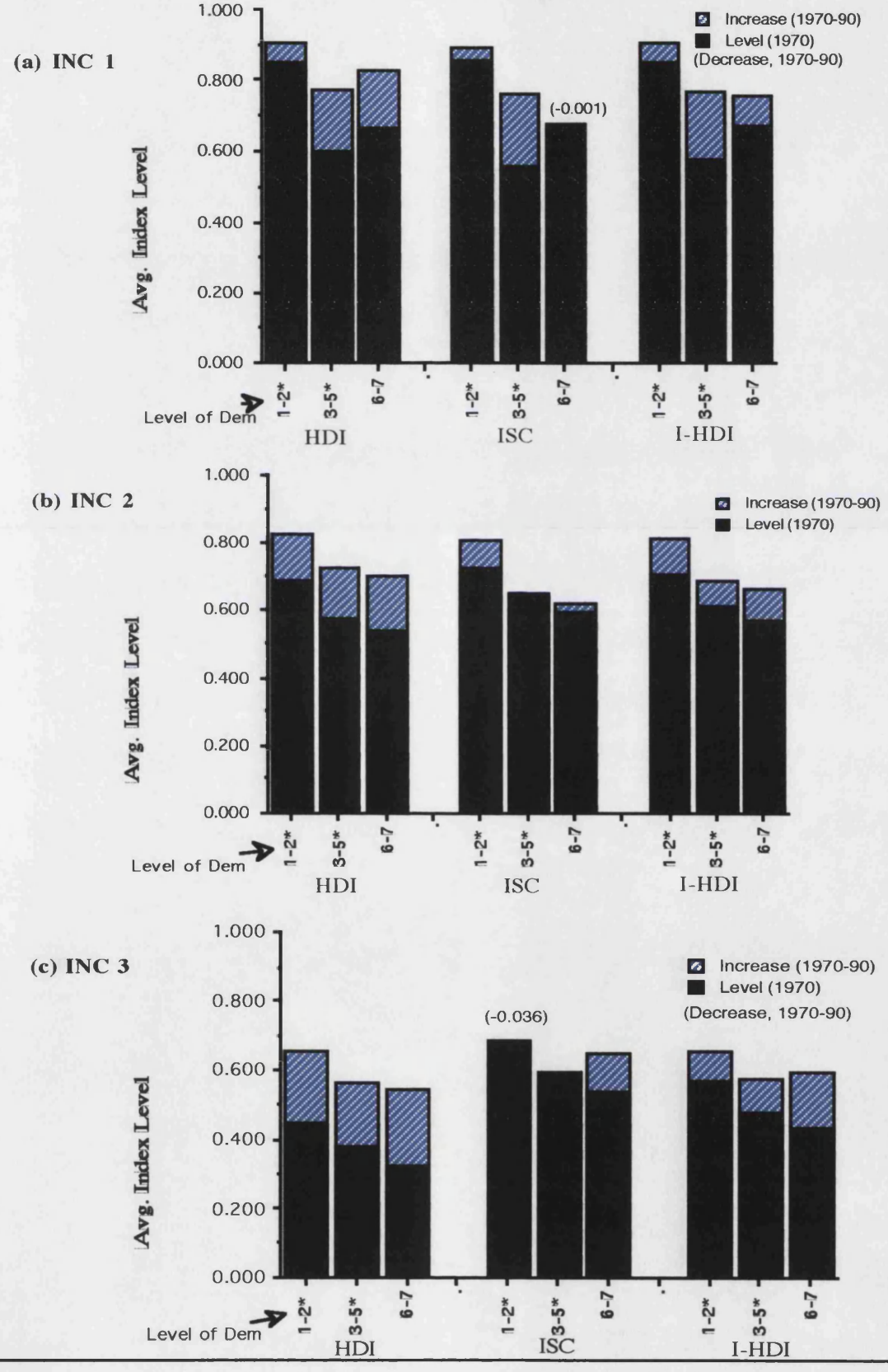
rate for three of the four income categories in the 1970/80 period (save for INC 4), for two categories in 1980/90 (INC 3 and INC 4), and for one category in 1970/90 (INC 3); and they produced the lowest average I-HDI rate increases for three income categories in 1970/80 (save for INC 4), for one category in 1980/90 (INC 3), and for two categories in 1970/90 (INC 1 and INC 3).

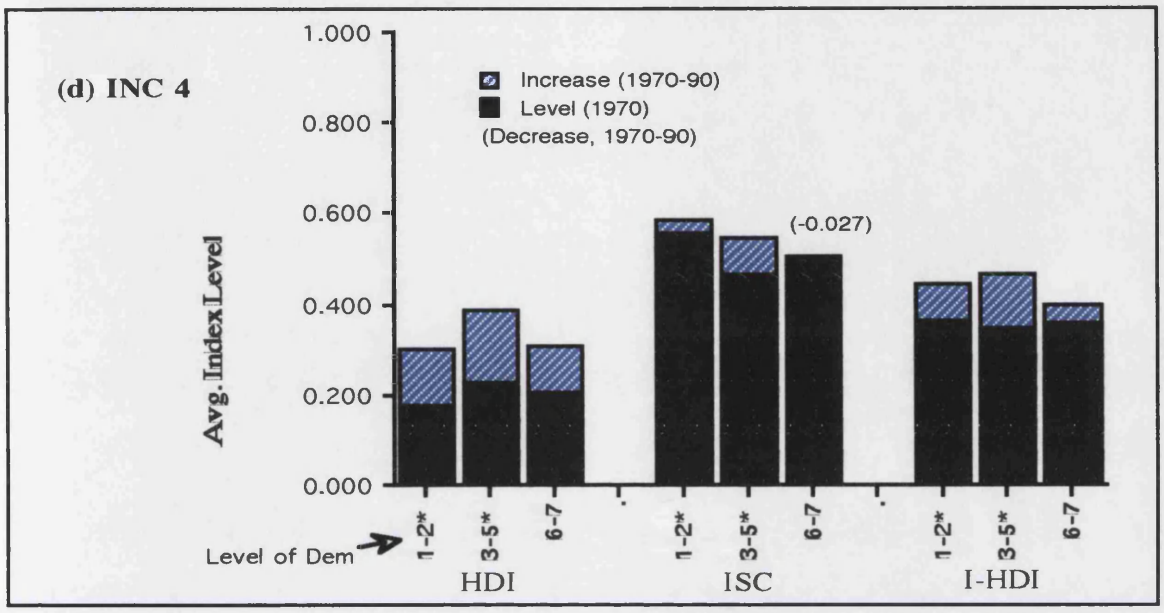
For the most part, the findings for each index were consistent. For two of the three periods, the non-democratic (6-7) states produced the highest average HDI increases for the INC 1, INC 2 and INC 3 categories (in the INC 4 category, the non-democratic (3-5*) states produced the highest HDI rate for both the 1970/80 and 1970/90 periods). The non-democratic (3-5*) states regularly showed the highest average ISC and I-HDI rates: for all three periods in the INC 1 and INC 4 categories, and for two periods in the INC 2 category (the non-democratic (6-7) states displayed the highest ISC rate for all three periods in the INC 3 category). In all, the non-democratic (3-5*) states displayed the highest average increase in over half of the comparative cases (20 of 36); the non-democratic (6-7) states displayed the highest average increase in twelve cases.

The problem with studying average increases in isolation, however, is that one neglects to consider the human development levels from which the increases emerge (an important omission given the findings in section 5.2). Thus, even when levels of economic development are controlled for, the actual rate increases are, to some extent, taken out of context, thereby allowing for a possible misreading of the data (especially in the case of wealthy states, as will be seen shortly). In order to further clarify the relationships between the variables, Figure 5.9 (overleaf) interprets the results from the perspective of each income category, with the rates and levels of human development portrayed together. Hence, one is able to trace the levels at which states began the period, the size of the rate increases and, therefore, the levels at which they ended the period.

Predictably, the distribution of countries was uneven at the INC 1 level (graph a): 23 (predominantly OECD) democratic states, one non-democratic (3-5*) state (the UAE), and six non-democratic (6-7) states (four Communist states - Poland, the USSR, Czechoslovakia, and the GDR - plus two oil-rich autocracies, Libya and Kuwait). The democratic states began the period at much higher HDI (0.850), ISC (0.857) and I-HDI (0.854) levels than the non-democratic states; they were already at the High index levels in 1970. It was inevitable, then, that they would also develop in smaller increments over the period, and thus their considerably lower average rates in Table 5.6 (0.060 for the HDI, 0.035 for the ISC, and 0.048 for the I-HDI); in percentage terms, the democratic states improved their HDI values by an average of 7.1%, their ISC values by 4.1%, and their I-HDI values by 5.6%. By comparison, the UAE and the non-democratic (6-7) states were still at the Medium index levels in 1970. Although the rate increases for the UAE (0.170 or 28.3% for the HDI, 0.203 or 36.5% for the ISC, 0.186 or 32.2% for the I-HDI) dwarfed the average rate increases produced by the democratic states, the UAE still fell well short of their average HDI, ISC and I-HDI levels by 1990. Hence, the UAE's high income rank

Fig. 5.9 Human Development Performance By Level of Democracy, Controlling For Economic Development





masked its relatively lower HDI, ISC and I-HDI values in 1970, thereby ensuring a 'competitive edge'. The same treatment may be given to the non-democratic (6-7) states: they started the period at much lower average index levels (0.665, 0.681 and 0.673) and, despite their comparatively better rate increases (save for the ISC), they ended the period at lower levels.

There was a more even distribution of countries at the INC 2 level (graph b): nine democratic states, eleven non-democratic (3-5*) states and ten non-democratic (6-7) states. The democratic states began and ended the period at higher average HDI, ISC and I-HDI levels than the non-democratic states, and performed quite well in between. They produced a lower average HDI increase (0.137) than both the non-democratic (3-5*) states (0.149) and the non-democratic (6-7) states (0.164), but displayed the largest improvement in social conditions over this period (0.080, compared to the very modest average ISC increases for the non-democratic states , 0.002 and 0.024). Consequently, the democratic states had the highest I-HDI increase (0.109) for the period, with the non-democratic (6-7) states slightly behind (0.094); the non-democratic (3-5*) states produced the lowest average rate (0.075). This generally favourable picture for the democratic states in the upper-middle income category was not, however, mirrored during the two shorter periods: they had the lowest average HDI, ISC and I-HDI rates in 1970/80, and came out second best for all three indices in 1980/90 (recall Table 5.6).

The distribution of countries was also fairly even at the INC 3 level (graph c): nine democratic states, thirteen non-democratic (3-5*) states and eight non-democratic (6-7) states. Although the democratic states began and ended the period at the highest average

HDI, ISC and I-HDI levels, the most authoritarian states performed the best over the period, producing the highest average HDI, ISC and I-HDI increases. The average HDI rate increase (0.222) for the non-democratic (6-7) states, though considerable, was only slightly higher than the increase for the democratic states (0.206); the non-democratic (3-5*) states had the smallest average HDI increase (0.182). The deterioration in social conditions among the democratic states (-0.036) compared unfavourably against the negligible average ISC increase for the non-democratic (3-5*) states (0.005) and the substantial ISC increase for the non-democratic (6-7) states (0.107). Overall, human development conditions for the most authoritarian states improved by almost twice as much as for democratic states, as suggested by the average I-HDI increases (0.164 and 0.085, respectively). These findings for the lower-middle income level were largely confirmed for the other periods: the non-democratic (6-7) states produced the highest average rates for all three indices in the 1970/80 period, and produced the highest ISC and I-HDI rates in the 1980/90 period (the democratic states surpassed their average HDI rate by a mere 0.002).

The distributional imbalance among the poorest countries at the INC 4 level (graph d) - only two democratic states (India and Gambia), nine non-democratic (3-5*) states and twenty-two non-democratic (6-7) states - requires that the average rates be treated with caution (recall the similar dilemma regarding Low index levels in section 5.2). All three groups of states began the period at roughly similar HDI, ISC and I-HDI levels. Nevertheless, the resulting rate increases were altogether dissimilar: the non-democratic (3-5*) states produced the highest average HDI, ISC, and I-HDI increases, while the democratic states came a very distant second in every case. The rates by level of democracy (1-2*, 3-5*, 6-7) were: 0.118, 0.157 and 0.108 for the HDI; 0.028, 0.078 and -0.027 for the ISC; and 0.073, 0.118, and 0.041 for the I-HDI. The superior performance of the non-democratic (3-5*) states at this income level was further underlined by their higher average rates for all three indices in the 1970/80 period, and for two of the three indices in the 1980/90 period (the democratic states produced the highest HDI rate increase).

It was only, therefore, at the middle income levels (INC 2 and INC 3) where the fairly even distribution of states by LoD values allowed for more balanced comparisons (Table 5.7 summarizes the average absolute and percentage increases over the entire 1970-90 period). In the upper-middle category (INC 2), democratic states had a mixed record: they did not perform as well in terms of HDI increases; they performed well in terms of ISC increases; and they performed as well in terms of I-HDI increases (posting the highest absolute increase but the second-highest percentage increase). In the lower-middle category (INC 3), democratic states performed as well in terms of absolute (though not percentage) HDI increases, but did not perform as well in terms of ISC and I-HDI increases.

Table 5.7 Average Rate Increases (1970-90) By Level Of Democracy, Middle-Income Categories (INC 2 & INC 3)

Inc Cat	LoD	(N)	HDI		ISC		I-HDI	
			AbsIncr	%Incr	AbsIncr	%Incr	AbsIncr	%Incr
INC 2	1-2*	(9)	0.137	19.9%	0.080	11.0%	0.109	15.3%
	3-5*	(11)	0.149	25.8%	0.002	0.2%	0.075	12.3%
	6-7	(10)	0.164	30.3%	0.024	4.0%	0.094	16.5%
INC 3	1-2*	(9)	0.206	45.8%	-0.036	-5.1%	0.085	14.9%
	3-5*	(13)	0.182	48.0%	0.005	0.8%	0.093	19.4%
	6-7	(8)	0.222	68.5%	0.107	19.8%	0.164	38.0%

The average levels of democracy observed for the best and worst performance groups in each of these income categories reflect, to some extent, these discrepancies (Table 5.8). In the upper-middle income category (INC 2), the average levels of democracy, falling marginally above the mid-point on the LoD scale, were largely indistinguishable when all three indices were considered: the average LoD value for the top 10 HDI performers (4.6) was slightly higher (less democratic) than the average for the bottom 10 HDI performers (3.7); the average LoD value for the top 10 ISC performers (3.9) was slightly lower (more democratic) than the average for the bottom 10 performers (4.5); and the average LoD values for the top and bottom I-HDI performers were virtually identical (4.1 and 4.8). These averages indicate the relative placement of democratic states: three (Portugal, Malta and Costa Rica) among the top 10 HDI performers and four (Jamaica, Barbados, Spain, Trinidad and Tobago) among the bottom 10 performers; four (Portugal, Spain, Greece, Trinidad and Tobago) among the top 10 ISC performers and three (Jamaica, Costa Rica, Peru) among the bottom 10 performers; four (Portugal, Greece, Spain, Malta) among the top 10 I-HDI performers and two (Jamaica and Peru) among the bottom 10 performers. It should be noted, however, that the placement of some of these democratic states among the bottom 10 performers owed more to their already high index values by 1970 (and thus to their propensity for slower incremental growth).[7]

[7]This is particularly true for Barbados, Spain and Trinidad and Tobago for the HDI, and Costa Rica for the ISC.

Table 5.8 The Best/Worst Performing States (1970-90) Beginning From Middle-Income Categories (1970)

(a) HDI			(b) ISC			(c) I-HDI		
Lev Rank	Country	Increase 1970-90 / LoD 1970-90	Lev Rank	Country	Increase 1970-90 / LoD 1970-90	Lev Rank	Country	Increase 1970-90 / LoD 1970-90
INC 2			***INC 2***			***INC 2***		
1.	Yugoslavia	0.280 6.4	1.	Portugal	0.329 1.6	1.	Portugal	0.290 1.6
2.	Iran	0.266 5.7	2.	Spain	0.224 1.6	2.	Chile	0.183 6.3
3.	Portugal	0.250 1.6	3.	Chile	0.199 6.3	3.	Brazil	0.180 4.2
4.	Brazil	0.249 4.2	4.	Greece	0.190 1.8	4.	Greece	0.171 1.8
5.	Saudi Arab	0.231 6.6	5.	Uruguay	0.110 3.0	5.	Spain	0.146 1.6
6.	Malta	0.228 1.5	6.	Brazil	0.110 4.2	6.	Albania	0.142 7.0
7.	Panama	0.224 5.3	7.	Hungary	0.102 6.2	7.	Panama	0.142 5.3
8.	Albania	0.217 7.0	8.	Trinid.&To.	0.093 1.8	8.	Malta	0.137 1.5
9.	Costa Rica	0.201 1.0	9.	Cuba	0.084 6.8	9.	Hungary	0.130 6.2
10.	Chile	0.166 6.3	10.	Gabon	0.081 5.9	10.	Gabon	0.114 5.9
	Avg LoD	*4.6*		*Avg LoD*	*3.9*		*Avg LoD*	*4.1*
21.	Argentina	0.105 3.2	21.	Saudi Arab	-0.009 6.6	21.	Iran	0.059 5.7
22.	Uruguay	0.097 3.0	22.	South Afr	-0.033 5.3	22.	Argentina	0.057 3.2
23.	Jamaica	0.087 1.9	23.	Romania	-0.034 7.0	23.	Romania	0.049 7.0
24.	Cuba	0.084 6.8	24.	Jamaica	-0.034 1.9	24.	Guinea	0.036 7.0
25.	Guinea	0.080 7.0	25.	Costa Rica	-0.035 1.0	25.	Jamaica	0.026 1.9
26.	Barbados	0.070 1.0	26.	Zambia	-0.091 5.1	26.	Yugoslavia	0.017 6.4
27.	Spain	0.068 1.6	27.	Mexico	-0.145 3.3	27.	South Afr	0.013 5.3
28.	Trinid.&To.	0.066 1.8	28.	Peru	-0.147 2.8	28.	Mexico	0.009 3.3
29.	South Afr	0.059 5.3	29.	Iran	-0.148 5.7	29.	Peru	-0.016 2.8
30.	Zambia	0.037 5.3	30.	Yugoslavia	-0.247 6.4	30.	Zambia	-0.027 5.1
	Avg LoD	*3.7*		*Avg LoD*	*4.5*		*Avg LoD*	*4.8*
INC 3			***INC 3***			***INC 3***		
1.	Tunisia	0.350 6.3	1.	Egypt	0.329 6.0	1.	Egypt	0.304 6.0
2.	S. Korea	0.336 4.1	2.	Jordan	0.318 6.3	2.	S. Korea	0.287 4.1
3.	Thailand	0.333 4.4	3.	S. Korea	0.237 4.1	3.	Jordan	0.270 6.3
4.	Malaysia	0.323 2.6	4.	Syria	0.168 6.4	4.	Syria	0.238 6.4
5.	Syria	0.308 6.4	5.	Thailand	0.114 4.4	5.	Tunisia	0.231 6.3
6.	Turkey	0.298 2.4	6.	Tunisia	0.112 6.3	6.	Thailand	0.223 4.4
7.	Egypt	0.282 6.0	7.	Honduras	0.108 2.9	7.	Malaysia	0.163 2.6
8.	Morocco	0.267 5.6	8.	Philippines	0.103 4.1	8.	Algeria	0.145 6.5
9.	Colombia	0.259 2.1	9.	Senegal	0.095 5.1	9.	Honduras	0.141 2.9
10.	Mauritius	0.254 2.2	10.	Congo	0.079 6.8	10.	Mauritius	0.141 2.2
	Avg LoD	*4.2*		*Avg LoD*	*5.3*		*Avg LoD*	*4.8*
21.	Zimbabwe	0.148 4.9	21.	Morocco	-0.040 5.6	21.	Dom. Rep	0.085 2.0
22.	Senegal	0.146 5.1	22.	Liberia	-0.062 5.9	22.	Colombia	0.079 2.1
23.	Philippines	0.132 4.1	23.	Ghana	-0.080 6.5	23.	PapuaNG	0.057 2.1
24.	Ivory Coast	0.127 6.4	24.	Uganda	-0.084 4.9	24.	Bolivia	0.031 3.4
25.	El Salvador	0.121 2.6	25	Bolivia	-0.100 3.4	25.	Sri Lanka	0.024 1.8
26.	Nicaragua	0.121 4.0	26.	Turkey	-0.101 2.4	26.	Liberia	0.013 5.9
27.	Ghana	0.099 6.5	27.	Colombia	-0.101 2.1	27.	Ghana	0.010 6.5
28.	Liberia	0.088 5.9	28.	Sri Lanka	-0.111 1.8	28.	Uganda	-0.012 4.9
29.	PapuaNG	0.083 2.1	29.	El Salvador	-0.162 2.6	29.	El Salvador	-0.021 2.6
30.	Uganda	0.059 4.9	30.	Nicaragua	-0.204 4.0	30.	Nicaragua	-0.041 4.0
	Avg LoD	*3.7*		*Avg LoD*	*3.9*		*Avg LoD*	*3.5*

In the lower-middle income category (INC 3), the top 10 performers across each index were, on average, less democratic than the bottom 10 performers: the average LoD value for the top 10 HDI performers (4.2) was quite similar to the average for the bottom 10 performers (3.7); but the average LoD values for the top 10 ISC and I-HDI performers (5.3 and 4.8) were much less democratic than the averages for the bottom 10 performers in each index (3.9 and 3.5). Hence, with the exception of the HDI, the democratic states were more often found among the bottom performers; specifically: there were four (Malaysia, Turkey, Colombia and Mauritius) among the top 10 HDI performers and two (El Salvador and Papua New Guinea) among the bottom performers; there was only one (Honduras) among the top 10 ISC performers and four (Turkey, Colombia, Sri Lanka and El Salvador) among the bottom performers; there were three (Malaysia, Honduras and Mauritius) among the top 10 I-HDI performers and five (Dominican Republic, Colombia, Papua New Guinea, Sri Lanka and El Salvador) among the bottom performers. The poor ISC and I-HDI records of several democratic states (El Salvador, Turkey, Colombia, Sri Lanka) were primarily due to conflicts which plagued them during the period. In brief, democratic states fared as well in the upper-middle income category, but not in the lower-middle income category.

Further insight into the relative performance of each level of democracy is gained by examining how developing states compared against another standard 'threshold', the average rate increase for all states at similar levels of economic development. After first computing the average rate increase by income category, the number of states with 'above average' rates within each level of democracy was then added up and calculated as a percentage of the total (Table 5.9).

Table 5.9 Percentage of 'Above Average' Performing Developing States By Level Of Democracy, Economic Development Threshold (1970-90)

	HDI			ISC			I-HDI		
LoD	1970-1980	1980-1990	1970-1990	1970-1980	1980-1990	1970-1990	1970-1980	1980-1990	1970-1990
1-2*	31%	50	41	31	50	35	19	54	24
3-5*	45	52	41	45	68	50	40	60	50
6-7	42	38	43	48	65	49	48	51	46

Note. The average HDI rates for each income category were, from INC 1 to INC 4: 0.054, 0.093, 0.093 and 0.052 for 1970/80; 0.037, 0.054, 0.111 and 0.061 for 1980/90; and 0.084, 0.150, 0.200 and 0.122 for 1970/90. The ISC averages per income category were: 0.011, 0.006, -0.010 and -0.001 for 1970/80; 0.038, 0.027, 0.032 and -0.010 for 1980/90; and 0.034, 0.033, 0.020 and 0.005 for 1970/90. The I-HDI averages per income category were: 0.033, 0.051, 0.041 and 0.025 for 1970/80; 0.037, 0.041, 0.072 and 0.026 for 1980/90; and 0.059, 0.092, 0.110 and 0.064 for 1970/90.

The table reveals that the non-democratic (3-5*) states produced the best overall record, with the highest percentage of above average performers in six of the nine cases; the non-democratic (6-7) states were very close behind (between 1-9%) in five of these cases. This achievement was not confined to any specific period or index: the non-democratic (3-5*) states produced the highest percentage of above average HDI, ISC and I-HDI performers for two of the three periods. Equally as impressive is that a *majority* of non-democratic (3-5*) states displayed above average performance rates in five of the nine cases.

Just under one-third of developing democracies (31%, or 5 of 16) produced HDI increases greater than their respective threshold averages for 1970-80; 45% of all non-democratic (3-5*) states and 42% of all non-democratic (6-7) states produced above average HDI increases for the period. But given the closeness of the results for the 1980-90 and 1970-90 periods, the LoD groups cannot really be distinguished in terms of HDI performance. Democratic states compared slightly less favourably in terms of ISC rate increases: both groups of non-democratic states displayed a higher proportion of above average performers for all three periods. The results for democratic states were also less impressive regarding I-HDI rate increases. Despite comparing well in the 1980-90 period, less than one-fifth (19%) of all developing democracies during the 1970-80 period, and less than one-quarter (24%) during the 1970-90 period, displayed above average I-HDI rate increases relative to their income thresholds. This latter figure is particularly striking, suggesting that, proportionally, roughly twice as many non-democratic (3-5*) and non-democratic (6-7) states (50% and 46%) produced above average I-HDI increases.

Developing democracies did not display the highest percentage of above average performers in any of the nine comparative cases; in six cases, they actually showed the lowest percentage. Moreover, in only three cases did a majority of democratic states display performance rates above their respective income thresholds, and all during one period (1980/90). Observing the findings by period, the record of democratic states may be summarized as follows: they compared relatively poorly during 1970-80; they performed as well during 1980-90; and, though comparing well in terms of HDI increases, their relatively poor ISC rates were translated into less than impressive I-HDI increases during 1970-90.

Overall, when levels of economic development were controlled for, democratic states performed as well in certain cases as non-democratic states, but worse in others. No level of democracy consistently (and decisively) produced the highest average increases across all three indices and for all three periods; although, more often than not, the non-democratic (3-5*) states displayed the highest average rate increases. In the two income categories where direct comparisons were meaningful, democratic states fared as well at the upper-middle income level, but not at the lower-middle income level. When evaluated against their respective income thresholds, democratic states did not compare as well as the non-democratic (3-5*) states.

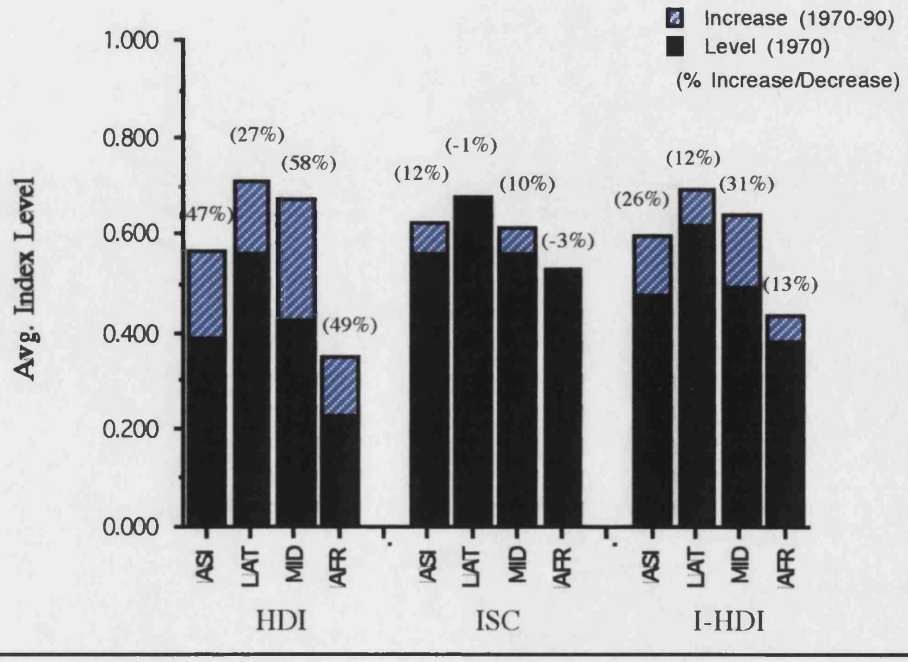
5.4 Levels of Democracy and Human Development Performance By Region

Overview of Regional Variations

The results of the previous sections will now be considered from the perspectives of the four developing regions: Asia (ASI, N=16), Latin America (LAT, N=23), the Middle East and North Africa (MID, N=13), and sub-Saharan Africa (AFR, N=36).[8] The objective is to evaluate how developing democracies fared against the records of non-democratic states in the same regional group over the 1970-90 period. Following a brief overview of the general trends, the relationship between levels of democracy and human development performance within each region will be considered in detail.

By way of introduction, Figure 5.10 depicts the levels and rates of human development by region. Unquestionably, the MID region displayed the most impressive results overall, producing the highest average HDI increase (0.247 or 58%), the highest I-HDI increase (0.151 or 31%), and the second highest ISC rate increase (0.055 or 10%). Hence, despite beginning the period at considerably lower average index levels, the MID region almost reached the LAT region's index levels by 1990. Beginning at roughly similar levels as the MID region, the ASI region also fared comparatively well, producing the second highest HDI, ISC and I-HDI rates (in absolute terms); the actual numbers for each index were: 0.181 (47%); 0.065 (12%) and 0.123 (26%). Already at relatively high index

Fig. 5.10 Levels and Rates of Human Development By Region, 1970-90



[8]The countries in each regional sample were given in Chapter 4 (footnote 12).

levels in 1970, the LAT region developed more incrementally. In particular, the LAT region displayed a decent average HDI rate increase (0.150 or 27%), a slight average ISC decrease (-0.006 or -1%), and a modest average I-HDI increase (0.072 or 12%). The results for the AFR region were unimpressive: the misleadingly high HDI percentage increase (49%) can be attributed to its very low average HDI value in 1970 (0.232); it showed an average ISC decrease (-0.013 or -3%); and its overall human development (I-HDI) conditions barely improved (0.050 or 13%). Clearly, levels of democracy have little to do with average regional performance rates: although the MID and AFR regions shared the same period LoD average (a staunchly authoritarian value of 5.9), their respective HDI, ISC and I-HDI performance rates differed enormously. The most democratic region (LAT, LoD=3.3) was also the most developed to begin with.

Judging by the average rate increases produced by the levels of democracy across the four regions (Table 5.10), it would appear that democratic states did not fare well. While no level of democracy consistently produced the highest average increases, irrespective of period and region, of the 36 comparative regional cases cited, the non-democratic (6-7) states produced the highest increases most frequently (15), followed by the non-democratic (3-5*) states (12) and the democratic states (9); it will be noted, however, that in many of these cases the average rate differences were, for all intents and purposes, negligible.

Table 5.10 Average Performance Rates By Level Of Democracy And Region

		1970/80			1980/90			1970/90		
		Level of Democracy			Level of Democracy			Level of Democracy		
Index	Reg	1-2*	3-5*	6-7	1-2*	3-5*	6-7	1-2*	3-5*	6-7
HDI	ASI	0.082	0.087	0.060	0.104	0.101	0.112	0.173	0.195	0.146
	LAT	0.057	0.103	0.081	0.076	0.086	0.034	0.137	0.169	0.129
	MID	0.108	0.103	0.155	0.190	0.132	0.078	0.298	0.234	0.246
	AFR	0.072	0.052	0.049	0.158	0.051	0.054	0.181	0.120	0.103
ISC	ASI	0.016	0.050	-0.022	0.044	0.052	0.060	0.003	0.137	-0.067
	LAT	-0.048	-0.032	-0.004	0.013	0.004	0.087	-0.030	-0.018	0.118
	MID	-0.079	0.033	0.005	-0.022	0.065	0.048	-0.101	0.005	0.088
	AFR	-0.054	-0.018	-0.010	0.058	0.010	-0.012	-0.004	-0.007	-0.018
I-HDI	ASI	0.049	0.069	0.019	0.074	0.077	0.086	0.088	0.166	0.039
	LAT	0.005	0.035	0.041	0.044	0.045	0.060	0.053	0.075	0.123
	MID	0.014	0.068	0.080	0.084	0.099	0.063	0.099	0.120	0.167
	AFR	0.009	0.017	0.020	0.108	0.031	0.021	0.089	0.056	0.043

Democratic states showed the highest regional rate in only one case for the 1970/80 period (HDI AFR), in four cases for the 1980/90 period (HDI MID, HDI AFR, ISC AFR, I-HDI AFR), and in four cases (HDI MID, HDI AFR, ISC AFR, I-HDI AFR) for the 1970/90 period. In contrast, the non-democratic (6-7) states produced the highest average increase in six cases for 1970/80, in five cases for 1980/90, and in four cases for 1970/90 (the corresponding numbers for the non-democratic (3-5*) states were five, three and four cases). The record of democratic states also varied by index: they displayed the highest average HDI increase in five of the twelve of the regional cases (AFR 1970/80, MID and AFR 1980/90, MID and AFR 1970/90); and the highest ISC rate in only two cases (AFR 1980/90, AFR 1970/90). The democratic states did not produce the highest average I-HDI rate for any region in 1970/80, and produced the highest average for only the AFR region in both the 1980/90 and 1970/90 periods. The non-democratic (6-7) states had the highest I-HDI increase in over half the cases: for three regions in 1970/80 (LAT, MID, AFR); for two regions in 1980/90 (ASI, LAT); and for two regions in the 1970/90 period (LAT, MID).

General comparisons may also be made by evaluating states against their respective regional 'thresholds' (average regional rate increases). After first determining the average regional rate increases for each period, the number of states with 'above average' rates within each level of democracy was then added up and calculated as a percentage of the total. The findings are presented in Table 5.11.

Table 5.11 Percentage of 'Above Average' Performing Developing States By Level of Democracy, Regional Threshold (1970-90)

	HDI			ISC			I-HDI		
LoD	1970-1980	1980-1990	1970-1990	1970-1980	1980-1990	1970-1990	1970-1980	1980-1990	1970-1990
1-2*	38%	62	41	38	42	29	25	50	41
3-5*	45	40	50	45	56	50	50	52	47
6-7	48	30	35	54	59	59	56	46	54

Note. The average HDI rates for each region (ASI, LAT, MID, AFR) were: 0.076, 0.076, 0.139 and 0.051 for 1970/80; 0.105, 0.072, 0.108 and 0.062 for 1980/90; and 0.181, 0.150, 0.247 and 0.113 for 1970/90. The ISC averages per region were: 0.014, -0.027, 0.005 and -0.013 for 1970/80; 0.051, 0.021, 0.049 and 0.000 for 1980/90; and 0.065, -0.006, 0.055 and -0.013 for 1970/90. The I-HDI averages per region were: 0.045, 0.025, 0.072 and 0.019 for 1970/80; 0.078, 0.047, 0.078 and 0.031 for 1980/90; and 0.123, 0.072, 0.151 and 0.050 for 1970/90.

Any strict interpretation of the data would suggest that democratic states did not compare favourably: they displayed the largest percentage of 'above average' performers only once (HDI 1980/90); they had the lowest percentage in six of the nine cases; and there

were only two cases where a majority of democratic states surpassed their respective regional thresholds (HDI 1980/90 and I-HDI 1980/90). The non-democratic (6-7) states produced the highest percentage of above average performers in six of the nine cases (in one period for the HDI, all three periods for the ISC, and in two of the three periods for the I-HDI).

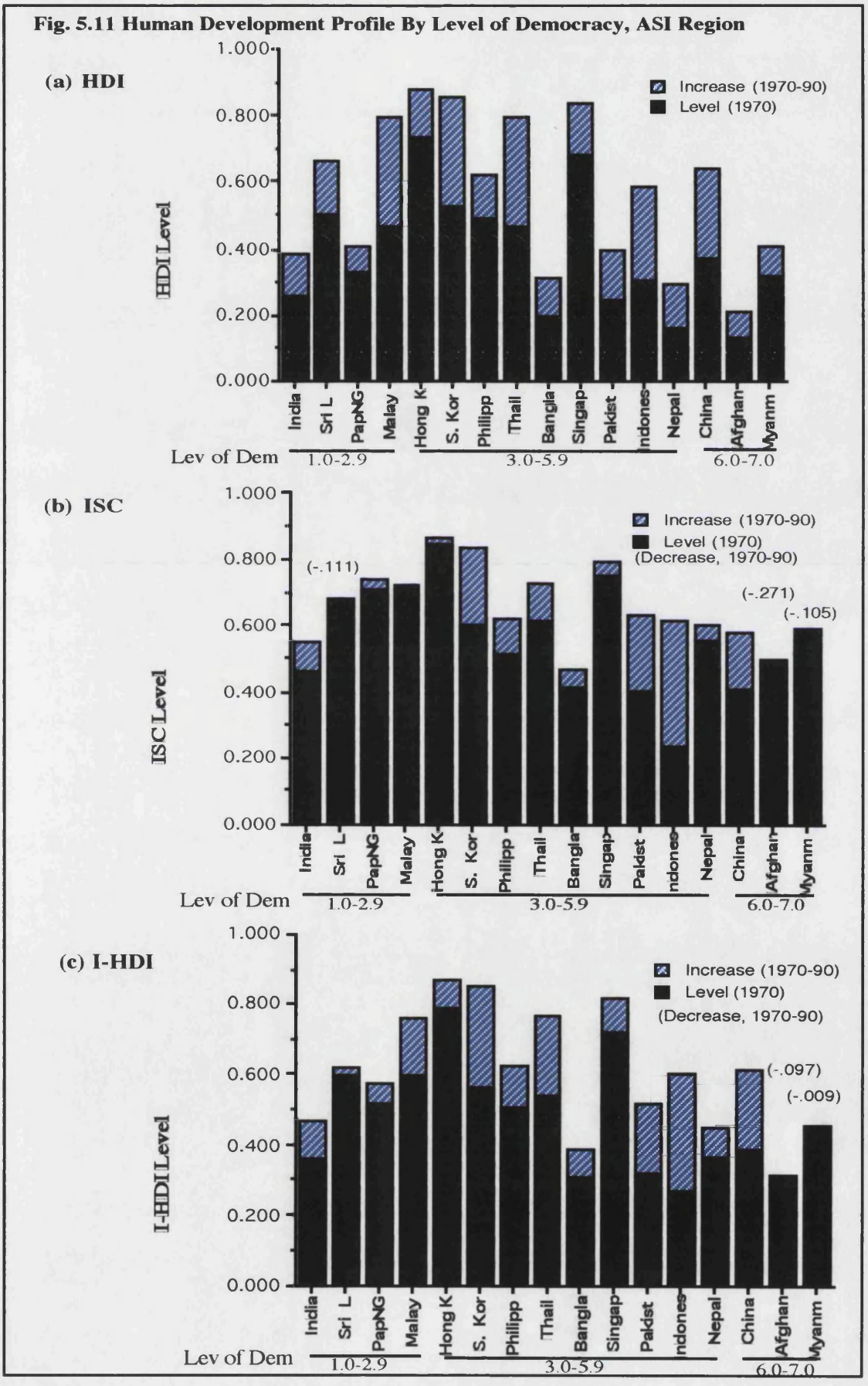
On closer inspection, however, the actual percentage differences were only substantial for two cases (ISC 1970/90, I-HDI 1970/80). For the other seven cases, democratic states performed largely on par with the non-democratic states. Though slightly outperformed during the 1970/80 period in terms of the HDI, democratic states produced by far the highest proportion of above average states in the following period (1980/90); over the entire period, democratic states produced a fractionally lower percentage (41%) than the non-democratic (6-7) states (50%). Democratic states did fare worse in terms of the ISC, but the only truly sizeable gap between the three LoD groups was found for the 1970/90 period. Despite their relatively poor showing in terms of the I-HDI for the 1970/80 period, democratic states were on equal terms during the 1980/90 period; over the 1970/90 period, they produced marginally fewer above average performers.

The general trends across regions indicate that developing democracies performed slightly worse over the period. It remains to be seen why such patterns emerged from the perspective of each region.

Levels of Democracy and Human Development Performance in Asia, 1970-90

Figure 5.11 depicts the levels and rates of human development for countries in the ASI region (organized, left to right, from the most to the least democratic states). Across all three indices, Hong Kong and Singapore were by far the most developed states in 1970 and, consequently, they developed more incrementally over the period. By 1990, owing to their extraordinary performance rates, South Korea and (to a lesser extent) Thailand had almost reached their index levels; Malaysia was close behind. Of the least developed states in 1970, Indonesia and China performed extremely well, followed at some distance by Pakistan. Five states - India, Bangladesh, Nepal, Afghanistan and Myanmar - began and ended the period at relatively low index levels.

Fig. 5.11 Human Development Profile By Level of Democracy, ASI Region



More direct comparisons may be made between democratic and non-democratic states. India (LoD 1.5) and Pakistan (4.9) started from very similar HDI, ISC and I-HDI levels, but the rate increases for Pakistan were much better across all three indices. Sri Lanka (LoD 1.8) started from very similar index levels as Thailand (4.4) and yet produced much smaller rate increases. No country was found at similar index levels as Papua New Guinea (LoD 2.1) across all three indices: it started from similar HDI levels as Indonesia (5.5), China (6.7) and Myanmar (7.0), and was surpassed by all three over the period (less so by Myanmar); it started from similar ISC levels as its two democratic counterparts, Sri Lanka and Malaysia, and produced better rate increases; and it started at almost the same I-HDI level as the Philippines (4.1), but displayed less than half its rate increase. The country which most closely resembled Malaysia (LoD 2.6) in terms of all three indices was Thailand (4.4): both had similar HDI increases; Thailand displayed better ISC and I-HDI rate increases.

In terms of average rate increases, democratic states performed better overall than the non-democratic (6-7) states, but not as well as the non-democratic (3-5*) states (Table 5.12). Led chiefly by three countries which placed among the top five ranks for every index (South Korea, Thailand and Indonesia), the non-democratic (3-5*) states produced the highest average HDI, ISC and I-HDI rate increases. Among democratic states, Malaysia stood out as the only consistently strong performer, as did China among the non-democratic (6-7) states. To place these regional performances into perspective, it will be recalled that among all states starting the period from Medium index levels (Table 5.4), South Korea was ranked first in terms of HDI and ISC increases, and second in terms of I-HDI increases, Thailand was ranked third and tenth in terms of I-HDI and ISC increases, and Malaysia was ranked seventh in terms of I-HDI increases. Furthermore, among all states starting from the lower-middle income range (Table 5.8), South Korea was ranked first in terms of I-HDI increases and second for HDI and ISC increases, Thailand was ranked third for HDI increases and fifth for ISC and I-HDI increases, and Malaysia was ranked fourth for HDI increases and seventh for I-HDI increases. The ASI region was well represented among the top performers.[9]

[9]Among all countries beginning at the Low index levels: Indonesia ranked first in terms of ISC and I-HDI increases and ninth for HDI increases; China ranked sixth for ISC and I-HDI increases; Pakistan ranked fifth for ISC increases and eighth for I-HDI increases; Thailand and Malaysia were ranked third and fourth for HDI increases. Furthermore, among all countries beginning at the poorest income level (INC 4): Indonesia ranked first for ISC and I-HDI increases, and second for HDI increases; China ranked third for HDI and I-HDI increases, and fourth for ISC increases; and Pakistan ranked third for ISC increases, fourth for I-HDI increases, and seventh for HDI increases.

Table 5.12 Performance Rates (1970-90) By Level of Democracy, ASI Region

Country	LoD	HDI INCREASE Absol	Perc	Ra	ISC INCREASE Absol	Perc	Ra	I-HDI INCREASE Absol	Perc	Ra
India	1.5	0.128	50%	11	0.091	20%	7	0.109	31%	8
Sri Lanka	1.8	0.159	31%	6	-0.111	-16%	15	0.024	4%	14
Papua NG.	2.1	0.083	26%	15	0.031	4%	11	0.057	11%	13
Malaysia	2.6	0.323	69%	3	0.002	0%	13	0.163	27%	6
Avg(1-2)*		*0.173*	*44%*		*0.003*	*2%*		*0.088*	*18%*	
Hong Kong	4.0	0.138	19%	9	0.018	2%	12	0.078	10%	12
Korea, S.	4.1	0.336	64%	1	0.237	39%	2	0.287	51%	2
Philippines	4.1	0.132	27%	10	0.103	20%	6	0.118	23%	7
Thailand	4.4	0.333	72%	2	0.114	18%	5	0.223	41%	3
Bangladesh	4.5	0.110	55%	13	0.051	12%	8	0.080	26%	11
Singapore	4.5	0.154	23%	7	0.045	6%	10	0.099	14%	9
Pakistan	4.9	0.149	61%	8	0.233	58%	3	0.191	59%	5
Indonesia	5.5	0.280	92%	4	0.382	163%	1	0.331	122%	1
Nepal	5.6	0.127	78%	12	0.047	9%	9	0.087	24%	10
Avg(3-5)*		*0.195*	*54%*		*0.137*	*36%*		*0.166*	*41%*	
China	6.7	0.272	73%	5	0.175	43%	4	0.223	57%	4
Afghanistan	6.9	0.077	59%	16	-0.271	-55%	16	-0.097	-31%	16
Myanmar	7.0	0.088	28%	14	-0.105	-18%	14	-0.009	-2%	15
Avg(6-7)		*0.146*	*53%*		*-0.167*	*-10%*		*0.039*	*8%*	

Notes. Absol=Absolute Increase; Perc=Percentage Increase; Ra=Rank (regional, Absolute Increase)

At the opposite end of the scale, two democratic states (Sri Lanka and Papua New Guinea) and two non-democratic (6-7) states (Afghanistan and Myanmar) consistently placed among the poorest performing ranks. The worst non-democratic (3-5*) performer, as determined by its ranks, was Bangladesh (although Hong Kong had lower regional ranks for the ISC and I-HDI, this was due to its already developed status). The internal conflict (with the Tamil Tigers) which engulfed Sri Lanka over the period was translated into relatively poor ISC (and thus I-HDI) values: it placed among the bottom 10 ISC and I-HDI performers at both the Medium index levels (Table 5.4) and the lower-middle income range (Table 5.8).

A good indication of how ASI states fared in the broader context is given in Table 5.13 (overleaf), where their performance rates are evaluated against the three standard thresholds employed in this chapter - the average increase for all developing states (Dev), and the average increases for all states starting from similar index levels (Lev) and income levels (Inc) in 1970.

Table 5.13 Evaluating Human Development Performance (1970-90) Against Threshold Standards, ASI Region

Country	LoD	HDI Increase			ISC Increase			I-HDI Increase		
		Dev	Lev	Inc	Dev	Lev	Inc	Dev	Lev	Inc
India	1.5	-	+	+	+	+	+	+	+	+
Sri Lanka	1.8	+	-	-	-	-	-	-	-	-
Papua NG.	2.1	-	-	-	+	+	+	-	-	-
Malaysia	2.6	+	+	+	-	-	-	+	+	+
Hong Kong	4.0	-	+	-	+	-	-	-	+	-
Korea, S.	4.1	+	+	+	+	+	+	+	+	+
Philippines	4.1	-	-	-	+	+	+	+	+	+
Thailand	4.4	+	+	+	+	+	+	+	+	+
Bangladesh	4.5	-	-	-	+	-	+	-	+	+
Singapore	4.5	-	-	+	+	+	+	+	+	+
Pakistan	4.9	-	+	+	+	+	+	+	+	+
Indonesia	5.5	+	+	+	+	+	+	+	+	+
Nepal	5.6	-	+	+	+	+	+	+	+	+
China	6.7	+	+	+	+	+	+	+	+	+
Afghanistan	6.9	-	-	-	-	-	-	-	-	-
Myanmar	7.0	-	-	-	-	-	-	-	-	-

Notes. The actual 1970-90 averages were given in Table 5.2 (Dev), Table 5.5 (Lev), Table 5.9 (Inc).
(+) above threshold average; (-) below threshold average.

Across the indices and their corresponding thresholds, the patterns for the democratic states were quite uniform: two of the four states displayed above average rates in every case (e.g. Sri Lanka and Malaysia surpassed the HDI developing average, India and Malaysia surpassed their respective HDI Lev thresholds, etc). India surpassed every one of its respective thresholds except the HDI developing average (not surprisingly, given that it typically belonged the same threshold groups as the sub-Saharan African states). On the other hand, Sri Lanka managed to surpass *only* the HDI developing average. Papua New Guinea did not surpass any HDI or I-HDI thresholds, but did exceed all three ISC thresholds (Dev, Lev and Inc). In contrast, Malaysia surpassed all HDI and I-HDI thresholds, but no ISC threshold (recall its miniscule ISC increase, 0.002).

The non-democratic (3-5*) states, on the whole, performed well across the thresholds (though fractionally less so for the HDI thresholds). Against the Dev threshold, the records were mixed: only three countries (South Korea, Thailand and Indonesia) produced better HDI increases than the developing average; all nine countries produced better ISC increases; and all but Hong Kong (because of its already high value) and Bangladesh exceeded the I-HDI developing average. Compared to other countries at similar index levels (Lev), the results were fairly impressive: all but the Philippines, Bangladesh and

Singapore crossed their respective HDI thresholds; all but Hong Kong and Bangladesh crossed their respective ISC thresholds; and all nine non-democratic (3-5*) states crossed their respective I-HDI thresholds. Similar observations may be made with regard to the income threshold (Inc): all but Hong Kong, Philippines and Bangladesh surpassed their respective HDI averages; and all but Hong Kong managed to surpass their respective ISC and I-HDI thresholds.

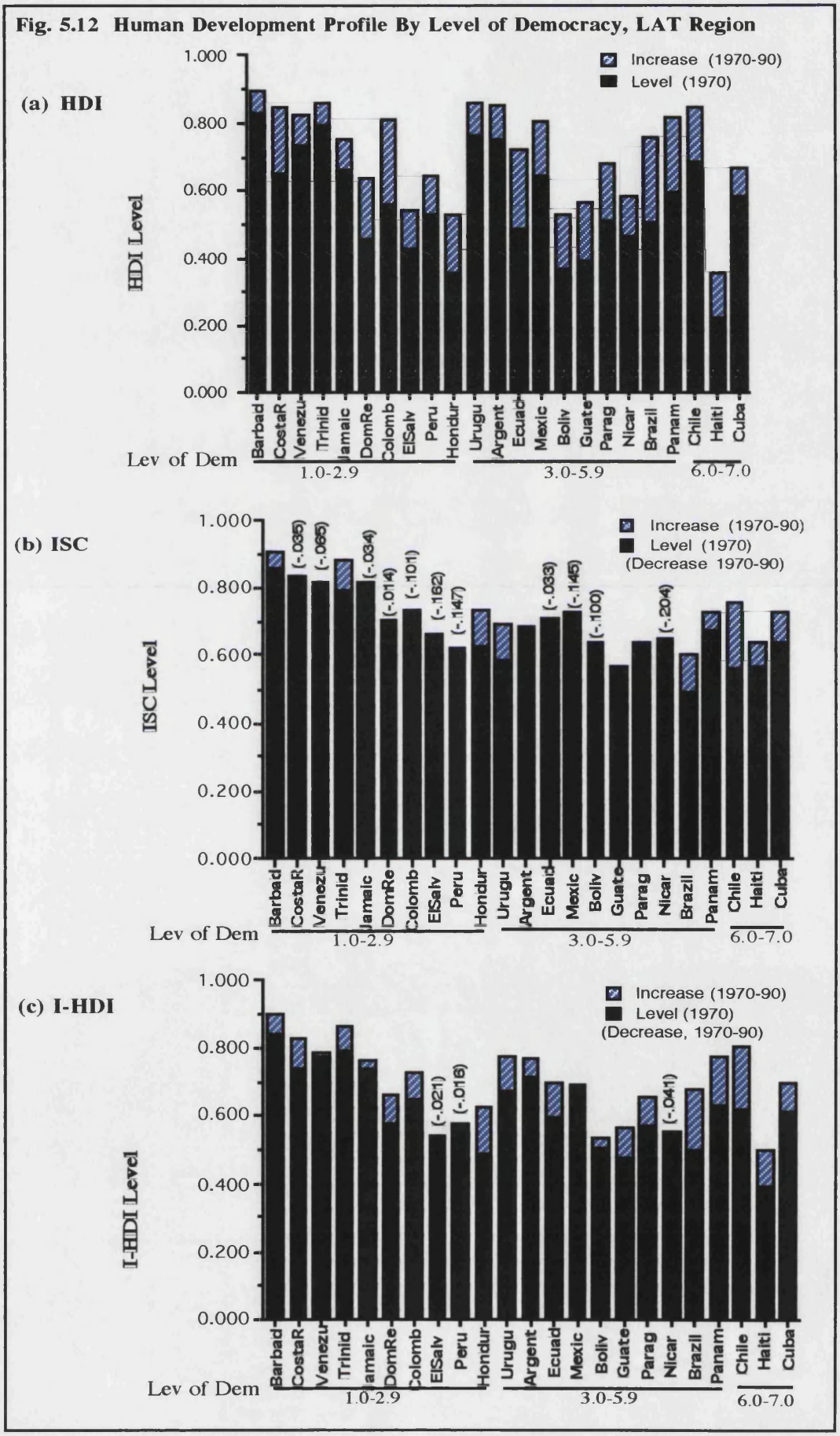
Of the three non-democratic (6-7) states, only China managed to surpass any index threshold. In fact, China joined South Korea, Thailand and Indonesia as the four ASI states which exceeded every index threshold.

Levels of Democracy and Human Development Performance in Latin America, 1970-90

The fairly even distribution of countries by level of democracy in the LAT region allows for a wealth of comparative opportunities. There is, moreover, a great variation in index levels and rates of change within each of the three levels of democracy (Figure 5.12). Irrespective of the range of index values in 1970, there were good and poor performers throughout the region. The high number of states with negative ISC rates over the period (signaling a deterioration in social conditions), including seven of the ten LAT democracies, was attributed to the poor Security Index values (as will be shown in Chapter 6, this was principally due to the runaway inflation which plagued these states, although in several cases the problem was compounded by civil war and general socio-political instability).

No non-democratic state began the period at ISC and I-HDI levels as high as Barbados (LoD 1.0) and Trinidad and Tobago (1.8), prompting comparisons for only the HDI: Argentina (3.2) and Uruguay (3.0) started from marginally lower HDI levels but produced better rate increases. Three other democracies (Costa Rica, Venezuela and Jamaica) started from levels comparable to Argentina and Uruguay: only Costa Rica produced a higher HDI and I-HDI increase; and all three displayed negative ISC rates (like Argentina, although Uruguay had a negligible increase). Of the five remaining democratic states (the Dominican Republic, Colombia, El Salvador, Peru, and Honduras), only Colombia (HDI) and Honduras (I-HDI) compared somewhat favourably against the rates produced by some of the better non-democratic performers (Brazil, Panama and Chile).

Fig. 5.12 Human Development Profile By Level of Democracy, LAT Region



On average, democratic states did not fare as well as non-democratic states over the period (Table 5.14): they produced the lowest average HDI increase (percentage-wise, but not in absolute terms, where they came out second best); they produced the worst average ISC rate (-0.030 or -4%); and they produced the lowest average I-HDI increase (0.053 or 8%). This record was influenced by the democracies at either extreme: those which were more developed to begin with, and thus more inclined to grow in smaller increments (Barbados, Trinidad and Tobago), and those which began the period at much lower index levels and actually saw their overall fortunes deteriorate (El Salvador, Peru). In terms of regional HDI performance, Colombia was ranked first, Costa Rica was ranked fifth, the Dominican Republic was ranked sixth, and Honduras was ranked seventh. Only Honduras (ranked fourth) and Trinidad and Tobago (fifth) performed well in terms of ISC increases. Regarding overall I-HDI rate increases, Honduras (fourth) stood alone among the democratic states (with an increase of 0.141, or 29% above its 1970 level).

Table 5.14 Performance Rates (1970-90) By Level of Democracy, LAT Region

Country	LoD	HDI INCREASE Absol	Perc	Ra	ISC INCREASE Absol	Perc	Ra	I-HDI INCREASE Absol	Perc	Ra
Barbados	1.0	0.070	8%	22	0.053	6%	9	0.062	7%	15
Costa Rica	1.0	0.201	31%	5	-0.035	-4%	16	0.083	11%	12
Venezuela	1.1	0.092	13%	19	-0.065	-8%	17	0.013	2%	19
Trinidad&T	1.8	0.066	8%	23	0.093	12%	5	0.080	10%	13
Jamaica	1.9	0.087	13%	20	-0.034	-4%	15	0.026	4%	18
Domin. Rep.	2.0	0.183	40%	6	-0.014	-2%	13	0.085	15%	10
Colombia	2.1	0.259	47%	1	-0.101	-14%	19	0.079	12%	14
El Salvador	2.6	0.121	29%	14	-0.162	-25%	22	-0.021	-4%	22
Peru	2.8	0.114	22%	16	-0.147	-24%	21	-0.016	-3%	21
Honduras	2.9	0.174	50%	7	0.108	17%	4	0.141	29%	4
Avg (1-2)*		*0.137*	*26%*		*-0.030*	*-4%*		*0.053*	*8%*	
Uruguay	3.0	0.097	13%	18	0.110	19%	2	0.104	15%	5
Argentina	3.2	0.105	14%	17	0.009	1%	10	0.057	8%	16
Ecuador	3.3	0.233	48%	3	-0.033	-5%	14	0.100	17%	7
Mexico	3.3	0.162	25%	11	-0.145	-20%	20	0.009	1%	20
Bolivia	3.4	0.161	44%	12	-0.100	-15%	18	0.031	6%	17
Guatemala	3.4	0.172	44%	8	0.005	1%	11	0.088	18%	8
Paraguay	4.0	0.168	33%	9	0.003	0%	12	0.086	15%	9
Nicaragua	4.0	0.121	26%	15	-0.204	-31%	23	-0.041	-7%	23
Brazil	4.2	0.249	49%	2	0.110	22%	3	0.180	36%	2
Panama	5.3	0.224	38%	4	0.060	9%	8	0.142	22%	3
Avg(3-5)*		*0.169*	*33%*		*-0.018*	*-2%*		*0.075*	*13%*	
Chile	6.3	0.166	24%	10	0.199	36%	1	0.183	29%	1
Haiti	6.7	0.136	62%	13	0.071	12%	7	0.104	26%	6
Cuba	6.8	0.084	14%	21	0.084	13%	6	0.084	14%	11
Avg(6-7)		*0.129*	*34%*		*0.118*	*20%*		*0.123*	*23%*	

Notes. Absol=Absolute Increase; Perc=Percentage Increase; Ra=Rank (regional, Absolute Increase)

The non-democratic (3-5*) states exhibited the best average HDI increase (0.169), the second best average ISC rate (a slight decline of -0.018 or -2%), and the second highest average I-HDI increase (0.075 or 13%). Specifically, Brazil (ranked second), Ecuador (third), and Panama (fourth) displayed excellent HDI records over the period. Uruguay (second), Brazil (third) and Panama (eighth) placed among the best ISC performers. Six of the top ten regional I-HDI performers were found within this group, including Brazil (second), Panama (third), Uruguay (fifth), Ecuador (seventh), Guatemala (eighth), and Paraguay (ninth). Conversely, Mexico (20th for ISC and I-HDI), Bolivia (18th for ISC, 17th for I-HDI) and Nicaragua (15th for HDI, 23rd for ISC, 23rd for I-HDI) did not perform well.

Of the three non-democratic (6-7) states, Cuba performed moderately well overall (especially in terms of the ISC and I-HDI), Haiti had modest increases (relative to its low starting levels), while Chile was arguably (along with perhaps Brazil and Panama) the region's top performer, ranked first for ISC and I-HDI increases, and tenth for HDI increases. Returning back to Figure 5.12, one may trace the impact of Chile's high rate increases. Despite beginning the period at HDI levels well below the three most developed democracies (Barbados, Trinidad and Tobago, Venezuela), Chile had managed to surpass Venezuela's HDI value by 1990, and fell just shy of the HDI values for the other two. The comparison with Costa Rica is particularly interesting. Chile had a marginally higher HDI value (0.682) in 1970 but, owing to a slightly lower rate increase (0.166), ended the period at exactly the same HDI level (0.848) as Costa Rica. The situation was different, however, with respect to the ISC: Chile's high rate increase (0.199) coupled with Costa Rica's slight decrease (-0.035) meant that, over the period, Chile's ISC value as a percentage of Costa Rica's rose from only 67% in 1970 to 95% in 1990. The net effect of the changes in HDI and ISC values was that, despite beginning with a considerably lower I-HDI value in 1970 (0.621, compared to 0.742 for Costa Rica), Chile had almost reached Costa Rica's I-HDI level by 1990 (the values were 0.804 and 0.825, respectively).

That Latin America contained some very good and some very poor performers, in comparison with other regions, could be observed in the earlier samples of Medium index level countries (Table 5.4) and middle-income countries (Table 5.8). Among all of the states starting from Medium index levels in 1970, Chile ranked fourth and fifth in terms of ISC and I-HDI increases. Four LAT states placed among the top 10 HDI performers: Colombia (third), Brazil (sixth), Panama (ninth) and Costa Rica (tenth). On the other hand, this region provided seven of the bottom 10 HDI performers, and five of bottom 10 ISC and I-HDI performers (including, in both cases, Mexico, Peru, El Salvador and Nicaragua). The LAT region's record for the middle-income categories varied. Among those states starting from the upper-middle income level (INC 2) in 1970, Chile ranked second for I-HDI increases, third for ISC increases, and tenth for HDI increases. Brazil also did well, ranking third for the I-HDI, fourth for the HDI and sixth for the ISC. Panama (seventh) and Costa Rica (ninth) appeared among the top 10 HDI performers, as did Uruguay (fifth), Trinidad and

Tobago (eighth) and Cuba (ninth) among the top 10 ISC performers. At the other extreme, LAT states were once again found among the poorest performers, comprising six of the bottom 10 HDI performers and four of the bottom 10 ISC and I-HDI performers. Among those states beginning at the lower-middle income level (INC 3), Honduras was ranked seventh and ninth for ISC and I-HDI increases, and Colombia was ranked ninth for HDI increases. El Salvador and Nicaragua were located among the worst HDI, ISC and I-HDI performers at this income level, joined by Bolivia (ISC and I-HDI), Colombia (ISC and I-HDI), and the Dominican Republic (I-HDI).

The rather mixed performance records of LAT states also become evident when evaluated against the three separate threshold standards (Table 5.15). The vast majority of democratic states did not exceed any one of the individual thresholds. Indicatively, only four (Costa Rica, the Dominican Republic, Colombia and Honduras) surpassed the HDI developing average, three (Barbados, Trinidad and Tobago, Honduras) surpassed the ISC developing average, and two (the Dominican Republic and Honduras) surpassed the I-HDI developing average. The results for the Lev and Inc thresholds were equally dismal (note

Table 5.15 Evaluating Human Development Performance (1970-90) Against Threshold Standards, LAT Region

Country	LoD	HDI Increase			ISC Increase			I-HDI Increase		
		Dev	Lev	Inc	Dev	Lev	Inc	Dev	Lev	Inc
Barbados	1.0	-	+	-	+	+	+	-	+	-
Costa Rica	1.0	+	+	+	-	-	-	-	+	-
Venezuela	1.1	-	-	+	-	-	-	-	-	-
Trinidad & T.	1.8	-	-	-	+	+	+	-	+	-
Jamaica	1.9	-	-	-	-	-	-	-	-	-
Domin. Rep.	2.0	+	-	-	-	-	-	+	-	-
Colombia	2.1	+	+	+	-	-	-	-	-	-
El Salvador	2.6	-	-	-	-	-	-	-	-	-
Peru	2.8	-	-	-	-	-	-	-	-	-
Honduras	2.9	+	-	-	+	+	+	+	+	+
Uruguay	3.0	-	-	-	+	+	+	+	+	+
Argentina	3.2	-	-	-	-	+	-	-	-	-
Ecuador	3.3	+	+	+	-	-	-	+	-	-
Mexico	3.3	+	+	+	-	-	-	-	-	-
Bolivia	3.4	+	-	-	-	-	-	-	-	-
Guatemala	3.4	+	-	-	-	-	-	+	-	-
Paraguay	4.0	+	-	-	-	+	-	+	-	-
Nicaragua	4.0	-	-	-	-	-	-	-	-	-
Brazil	4.2	+	+	+	+	+	+	+	+	+
Panama	5.3	+	+	+	+	+	+	+	+	+
Chile	6.3	+	+	+	+	+	+	+	+	+
Haiti	6.7	-	+	+	+	+	+	+	+	+
Cuba	6.8	-	-	-	+	+	+	+	-	-

Notes. The actual 1970-90 averages were given in Table 5.2 (Dev), Table 5.5 (Lev), Table 5.9 (Inc).
(+) above threshold average; (-) below threshold average.

that only Honduras exceeded the average I-HDI rate increase produced by all states at its respective income level). Two states (Costa Rica and Colombia) surpassed all three HDI thresholds, three states (Barbados, Trinidad and Tobago, Honduras) surpassed all three ISC thresholds, and only Honduras surpassed all three I-HDI thresholds.

A higher proportion of non-democratic (3-5*) states exceeded the HDI developing average and the I-HDI developing average (but only three surpassed the ISC developing average). The majority, however, failed to cross their respective Lev or Inc thresholds for any index (five of the ten managed to do so for the ISC Lev threshold). Across the indices, four states (Ecuador, Mexico, Brazil, Panama) exceeded all three HDI thresholds, and three states (Uruguay, Brazil and Panama) exceeded all three ISC and I-HDI thresholds. Only Brazil and Panama exceeded every index threshold.

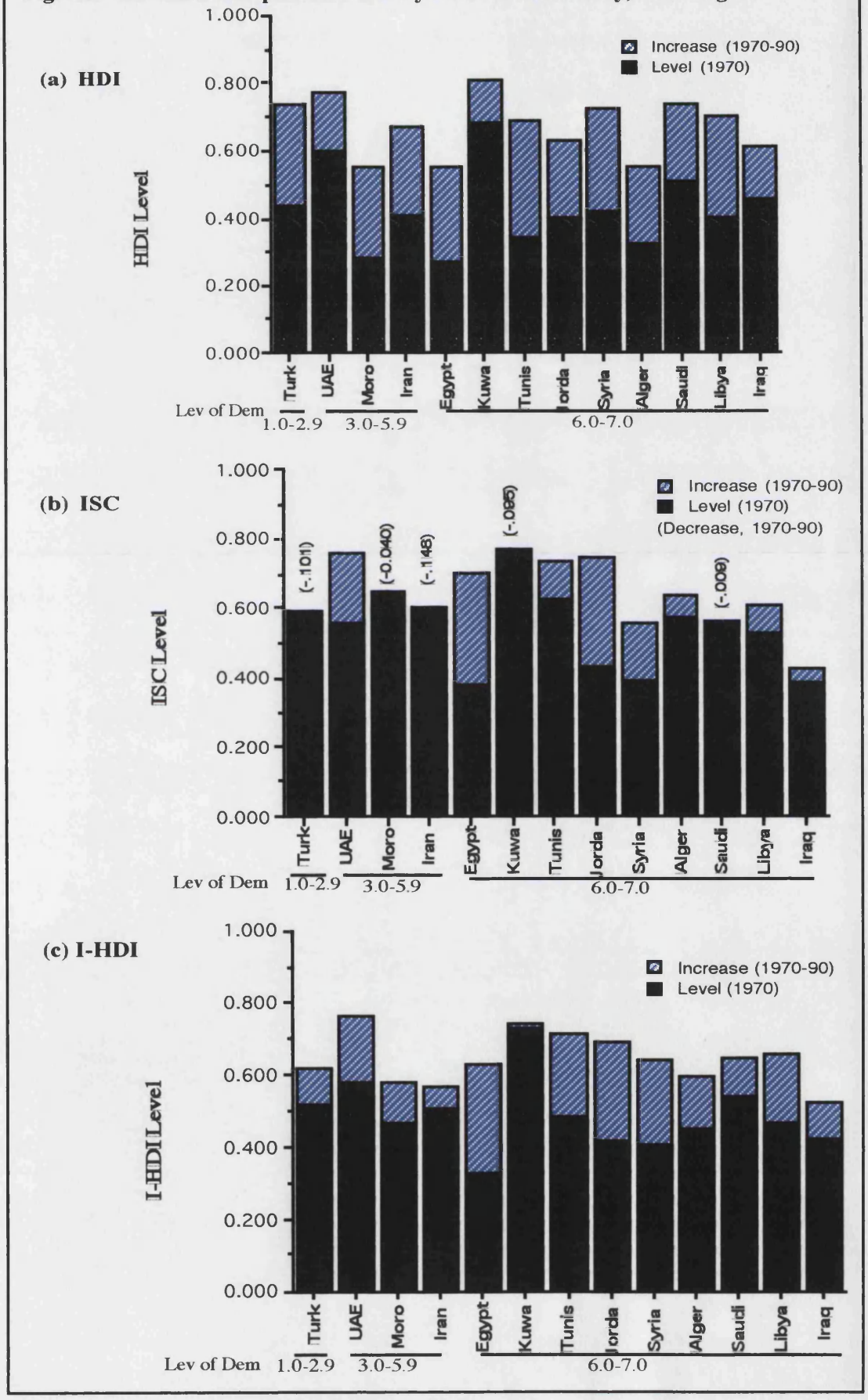
Among the non-democratic (6-7) states, Chile had a higher HDI increase than the developing average, although all three states surpassed the ISC and I-HDI developing averages. Furthermore, Chile managed to exceed every index threshold, whereas Haiti failed to surpass only one, the HDI developing average (Haiti's apparently favourable record was due to the fact that its respective sample groups principally consisted of the sub-Saharan African states). Cuba surpassed all three ISC thresholds, none of the HDI thresholds, and only the I-HDI developing average.

Levels of Democracy and Human Development Performance in the Middle East and North Africa, 1970-90

Despite the occasional intervention by the military, Turkey (LoD of 2.4) was the only country in the MID region which satisfied the statistical definition of a democratic state over the period. Three MID states (UAE, Morocco and Iran) had LoD values in the non-democratic (3-5*) range, while the remaining nine states had firmly authoritarian LoD values (6-7). With the exception of Kuwait, which was already highly developed by 1970, all MID states began the period from roughly similar levels (Figure 5.13).

Five states began from almost identical HDI levels as Turkey (0.441). With an increase of 0.298 (68%), Turkey outperformed three of these states - Iran (0.266), Jordan (0.223) and Iraq (0.162) - and essentially equaled the rate increases for Libya (0.300) and Syria (0.308). Of the six states which started the period around Turkey's ISC level (0.592), only Iran produced a poorer ISC rate (-0.148) than Turkey (-0.101); Saudi Arabia showed a very slight decrease (-0.009), whereas Algeria (0.059), Tunisia (0.112) and Egypt (0.325) produced ISC increases. Although starting from a lower ISC level than Turkey in 1970, Jordan's high increase (0.318 or 73%), coupled with Turkey's ISC decrease, meant that Jordan ended up with a substantially higher ISC value by 1990 (0.751, compared to Turkey's 0.490). Five states began the period near Turkey's I-HDI level (0.516), four of which - the UAE (0.186), Tunisia (0.231), Libya (0.190) and Saudi Arabia (0.111) - surpassed Turkey's I-HDI rate increase (0.099); only Iran (0.059) failed to do so.

Fig. 5.13 Human Development Profile By Level of Democracy, MID Region



Turkey produced a higher HDI increase (0.298) than all three of the non-democratic (3-5*) states (average increase of 0.234), and for all but three of the non-democratic (6-7) states (which together had an average rate of 0.246): Tunisia (0.350), Syria (0.308) and Libya (0.300). Turkey was one of five MID states to display a negative ISC rate for the period (largely because of its conflict with the Kurds), but the actual magnitude of its decrease (-0.101) was surpassed only by an even worse rate for Iran (-0.148); the average ISC rates were 0.005 for the non-democratic (3-5*) states and 0.088 for the non-democratic (6-7) states. Its I-HDI increase (0.099 or 19%) was lower than the average increases for the non-democratic (3-5*) states (0.120 or 23%) and the non-democratic (6-7) states (0.167 or 38%). On the whole, Turkey did well in terms of HDI rates (ranked fourth in the region), but not in terms of ISC or I-HDI rates (ranked 12th and 11th).

Several states in this region performed particularly well for all three indices (Table 5.16), all of which had strongly authoritarian LoD values. Egypt displayed the best ISC and I-HDI increases, and was ranked fifth in terms of the HDI. Jordan had the second best ISC and I-HDI increases, but was ranked tenth for the HDI. Syria had the second best HDI increase, the fourth best ISC increase, and the third best I-HDI increase. Tunisia had the highest HDI increase and was ranked fourth and fifth for I-HDI and ISC increases. Libya was ranked third for the HDI, sixth for the ISC, and fifth for the I-HDI. Even the remaining four states from this LoD group produced some impressive absolute and percentage increases (and thus the high average rate increases). In fact, the MID non-democratic (6-7) states produced a much higher average HDI increase (0.246 or 65%) than the ASI non-democratic (3-5*) states (0.195 or 54%), the LAT non-democratic (3-5*) states (0.169 or 33%) and the LAT non-democratic (6-7) states (0.129 or 34%). Their average ISC rate (0.088 or 20%), however, was better than the average for the LAT non-democratic (3-5*) states (-0.018 or -2%), but worse than the rates for the ASI non-democratic (3-5*) states (0.137 or 36%) and the LAT non-democratic (6-7) states (0.118 or 20%). In terms of overall human development performance, the MID non-democratic (6-7) states and ASI non-democratic (3-5*) states displayed virtually identical records - I-HDI increases of 0.167 (38%) and 0.166 (41%) - followed by the LAT non-democratic (6-7) states (0.123 or 23%) and the LAT non-democratic (3-5*) states (0.075 or 13%). The record of the MID non-democratic (6-7) states was largely the reason why the MID region as a whole did quite well compared to the other regions (recall Figure 5.10 above).

Table 5.16 Performance Rates (1970-90) By Level of Democracy, MID Region

Country	LoD	HDI INCREASE Absol	Perc	Ra	ISC INCREASE Absol	Perc	Ra	I-HDI INCREASE Absol	Perc	Ra
Turkey	2.4	0.298	68%	4	-0.101	-17%	12	0.099	19%	11
UAE	5.4	0.170	28%	11	0.203	36%	3	0.186	32%	6
Morocco	5.6	0.267	95%	6	-0.040	-6%	10	0.114	24%	8
Iran	5.7	0.266	66%	7	-0.148	-24%	13	0.059	12%	12
Avg(3-5)*		*0.234*	*63%*		*0.005*	*2%*		*0.120*	*23%*	
Egypt	6.0	0.282	105%	5	0.325	86%	1	0.304	94%	1
Kuwait	6.1	0.125	18%	13	-0.095	-12%	11	0.012	2%	13
Tunisia	6.3	0.350	103%	1	0.112	18%	5	0.231	48%	4
Jordan	6.3	0.223	55%	10	0.318	73%	2	0.270	65%	2
Syria	6.4	0.308	74%	2	0.168	43%	4	0.238	59%	3
Algeria	6.5	0.230	71%	9	0.059	10%	7	0.145	32%	7
Saudi Arabia	6.6	0.231	45%	8	-0.009	-2%	9	0.111	21%	9
Libya	6.7	0.300	74%	3	0.079	15%	6	0.190	41%	5
Iraq	6.9	0.162	36%	12	0.037	9%	8	0.099	24%	10
Avg(6-7)		*0.246*	*65%*		*0.110*	*27%*		*0.178*	*43%*	

Notes. Absol=Absolute Increase; Perc=Percentage Increase; Ra=Rank (regional, Absolute Increase)

Individually, the MID states excelled when human development levels and income levels were controlled for. The overwhelming majority of MID states began the period at Low index levels. Five of the top 10 HDI performers found at this level came from this region - Tunisia (third), Syria (fifth), Libya (sixth), Turkey (seventh), Egypt (eighth) - as did three of the top 10 ISC performers - Egypt (second), Jordan (fourth), Syria (eighth) - and five of the top 10 I-HDI performers - Egypt (second), Jordan (third), Syria (fifth), Tunisia (sixth), and Libya (tenth). Most of the MID states also began from the lower-middle income level (INC 3) in 1970 (Table 5.8 above). The record here was even more impressive, with the MID region producing five of the top 10 HDI performers, four of the top 10 ISC performers, and five of the top 10 I-HDI performers. More specifically: Egypt was ranked first for ISC and I-HDI increases and seventh for HDI increases; Jordan was ranked second and third for ISC and I-HDI increases; Tunisia was ranked first for HDI increases, sixth for ISC increases, and fifth for I-HDI increases; Syria was ranked fourth for ISC and I-HDI increases and fifth for HDI increases; Morocco was ranked eighth for HDI increases; and Algeria was ranked eighth for I-HDI increases.

The excellent performance of MID states is also evident in their records against the three threshold standards for each index (Table 5.17). All MID states (save for Kuwait) surpassed the developing averages for the HDI and I-HDI, and eight of the thirteen states surpassed the ISC developing average. Ten of the thirteen states exceeded their respective HDI Lev thresholds, and eight exceeded their respective ISC and I-HDI Lev thresholds. All

Table 5.17 Evaluating Human Development Performance (1970-90) Against Threshold Standards, MID Region

Country	LoD	HDI Increase			ISC Increase			I-HDI Increase		
		Dev	Lev	Inc	Dev	Lev	Inc	Dev	Lev	Inc
Turkey	2.4	+	+	+	-	-	-	+	-	-
UAE	5.4	+	+	+	+	+	+	+	+	+
Morocco	5.6	+	+	+	-	-	-	+	-	+
Iran	5.7	+	+	+	-	-	-	-	-	-
Egypt	6.0	+	+	+	+	+	+	+	+	+
Kuwait	6.1	-	-	+	-	-	-	-	-	-
Tunisia	6.3	+	+	+	+	+	+	+	+	+
Jordan	6.3	+	-	+	+	+	+	+	+	+
Syria	6.4	+	+	+	+	+	+	+	+	+
Algeria	6.5	+	+	+	+	+	+	+	+	+
Saudi Arabia	6.6	+	+	+	-	-	-	+	+	+
Libya	6.7	+	+	+	+	+	+	+	+	+
Iraq	6.9	+	-	+	+	+	+	+	-	+

Notes. The actual 1970-90 averages were given in Table 5.2 (Dev), Table 5.5 (Lev), Table 5.9 (Inc).
(+) above threshold average; (-) below threshold average.

thirteen states produced HDI increases above their respective Inc thresholds, whereas eight crossed their ISC Inc thresholds and ten crossed their respective I-HDI Inc thresholds. Most impressively, ten of the thirteen MID states managed to surpass all three HDI thresholds, eight surpassed all three ISC thresholds, and eight surpassed all three I-HDI thresholds.

Turkey's own performance was, by comparison, mediocre: although it exceeded all three HDI thresholds, it did not exceed any ISC threshold and could only exceed the developing average among the I-HDI thresholds. Six states in this region succeeded in surpassing every threshold - the UAE, Egypt, Tunisia, Syria, Algeria and Libya - and one state (Jordan) surpassed all but one threshold.

Levels of Democracy and Human Development Performance in sub-Saharan Africa, 1970-90

There were only two AFR states which met the statistical definition of a democracy over this period, Mauritius (LoD of 2.2) and Gambia (2.5). Botswana fell just outside the LoD 1-2* range (3.0), a reflection of its status as more of a de facto 'dominant-party' state (Chapter 7). Of the 34 non-democratic states, 12 had period LoD values in the 3-5* range and 22 had LoD values of 6-7.

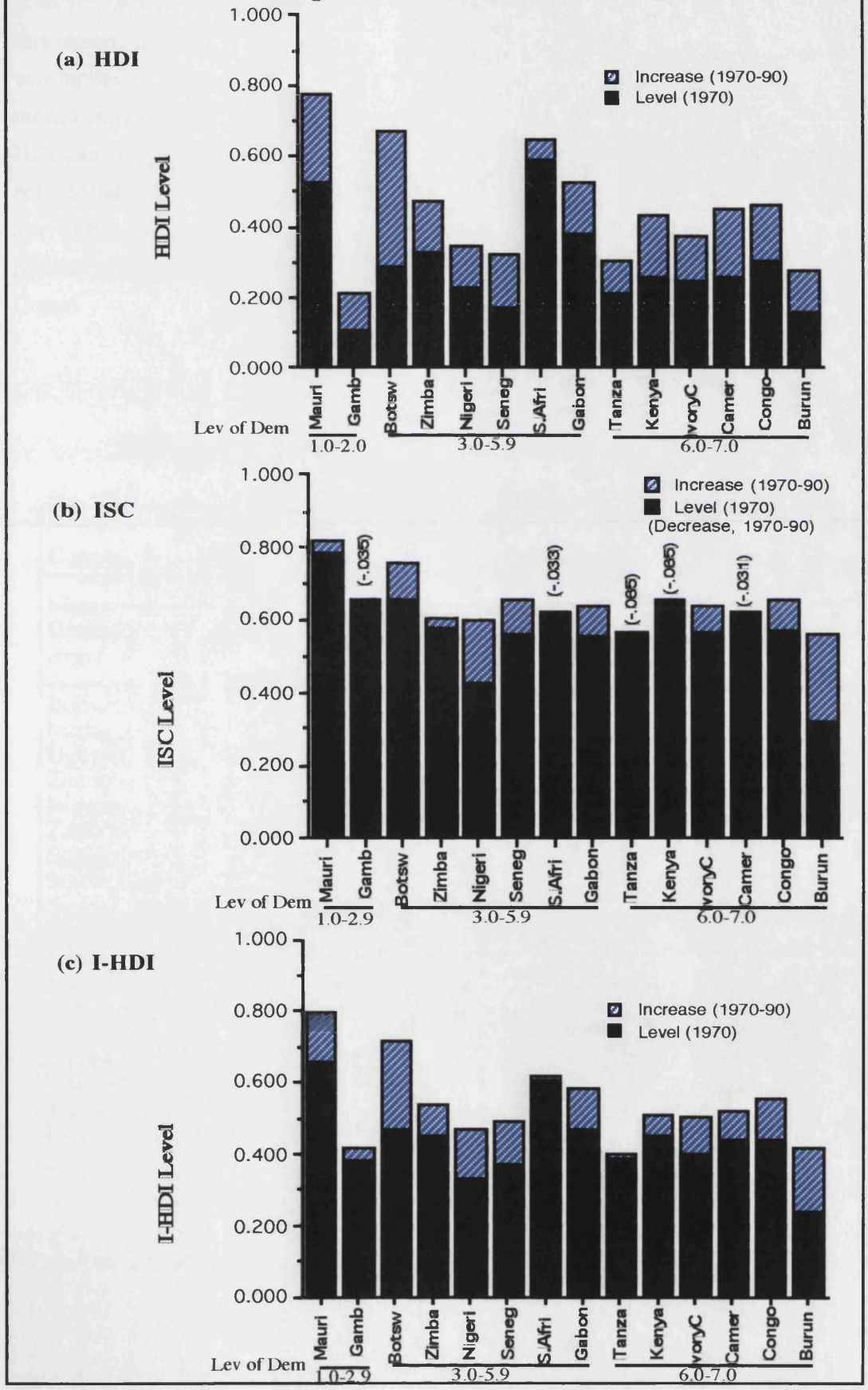
The generally poor record for this region as a whole has previously been acknowledged (Figure 5.10 above). With the notable exceptions of Mauritius and Botswana, very few of these states performed at or near the rates of other developing states. Most AFR states began the period from quite low index levels and came from the poorest income groups. A selection of AFR states and their respective records over this period is presented in Figure 5.14.

The record of Mauritius was impressive. Despite starting with an HDI value of 0.524 in 1970, placing it barely within the Medium level, its increase of 0.254 meant that Mauritius fell just shy of the High Level mark by 1990 (0.778). In contrast, South Africa (LoD 5.3) began from a slightly higher level (0.591) but produced an HDI increase of only 0.059. Mauritius' incremental ISC increase (0.028) should be evaluated against its already high ISC level in 1970 (0.787); it had crossed into the High index level (0.800+) by 1990. As a result of its HDI and ISC increases, Mauritius' I-HDI value rose from 0.656 in 1970 to 0.797 in 1990 (almost at the High index level), an increase of 0.141 or 21%. South Africa, which began from a slightly lower I-HDI level (0.606) but also from one income level above (INC 2), could only improve its I-HDI value by 0.013 (2%).

The other democratic state, Gambia, could hardly provide a starker contrast. Its HDI value for 1970 (0.107) placed it among the least developed states; only Mali had a lower value (0.102). Although Gambia essentially doubled its HDI value by 1990 (0.215), its woefully low value still placed it (barely) above only Sierra Leone (0.209), Burkina Faso (0.203), Chad (0.214), Niger (0.209), Mali (0.214) and Guinea (0.191). Gambia's ISC value in 1970 (0.655) placed it among most of the AFR states; moreover, like the majority (23 of 36) of these states, Gambia showed a negative ISC rate (-0.035 or -5%) over the period. Gambia's I-HDI value in 1970 (0.381), though quite low, was higher than half the AFR countries' I-HDI values. Despite a meager I-HDI increase (0.036 or 10%) over the period, Gambia's 1990 value (0.417) was still greater than the I-HDI values for 17 AFR states.

Botswana was the stellar performer in this region. The ruling Botswana Democratic Party managed to transform the country dramatically in just two decades. With an HDI value of only 0.284 in 1970, Botswana had become a Medium level state by 1990 (0.670) because of its phenomenal rate increase (0.386 or 136%). Its steady ISC increase (0.102 or 16%) raised Botswana's ISC value from 0.652 in 1970 to 0.754 in 1990. On the strength of these rates, Botswana produced an overall I-HDI increase of 0.244 (52%), from 0.468 to 0.712, thereby achieving the status of 'upper-middle level' state (to fully appreciate this accomplishment, one may observe in these graphs the very different fortunes of six other AFR states which began the period from similar index levels - Zimbabwe, Gabon, Kenya, Ivory Coast, Cameroon, and Congo). Furthermore, despite starting from considerably lower levels, Botswana almost reached Mauritius' high index values by 1990.

Fig. 5.14 Human Development Profile By Level of Democracy, AFR Region (Selected Countries)



On the strength of Mauritius' performance, the two democratic states produced better average increases than the non-democratic groups (Table 5.18). This observation is, however, largely undermined by the uneven distribution of states by level of democracy in this region, and by the altogether dissimilar records of Mauritius and Gambia. Botswana was ranked first for HDI and I-HDI increases and third for ISC increases. Mauritius was ranked second in the region for HDI increases, thirteenth for ISC increases, and third for I-HDI increases. Despite its (misleadingly) impressive record - ranked first for ISC increases and second for I-HDI increases (twelfth for HDI increases) - Burundi remained at relatively low index levels by 1990.[10] Other countries which performed comparatively well (in regional terms) for all three indices include Nigeria, Senegal, Gabon, Ivory Coast and Congo.

Table 5.18 Performance Rates (1970-90) By Level of Democracy, AFR Region

Country	LoD	HDI INCREASE Absol	Perc	Ra	ISC INCREASE Absol	Perc	Ra	I-HDI INCREASE Absol	Perc	Ra
Mauritius	2.2	0.254	48%	2	0.028	4%	13	0.141	21%	3
Gambia	2.5	0.108	101%	15	-0.035	-5%	23	0.036	10%	19
Avg(1-2)*		*0.181*	*75%*		*-0.004*	*-1%*		*0.089*	*16%*	
Botswana	3.0	0.386	136%	1	0.102	16%	3	0.244	52%	1
Madagascar	4.6	0.105	36%	17	-0.045	-7%	24	0.030	7%	23
Uganda	4.9	0.059	28%	30	-0.084	-25%	31	-0.012	-5%	31
Zimbabwe	4.9	0.148	45%	7	0.028	5%	12	0.088	19%	9
Nigeria	5.0	0.118	51%	13	0.164	38%	2	0.141	43%	4
Zambia	5.1	0.037	12%	35	-0.091	-15%	32	-0.027	-6%	32
Senegal	5.1	0.146	83%	9	0.095	17%	4	0.120	33%	5
South Africa	5.3	0.059	10%	32	-0.033	-5%	22	0.013	2%	28
Sierra Leone	5.6	0.054	35%	33	-0.155	-28%	33	-0.050	-14%	33
Sudan	5.7	0.088	47%	22	-0.081	-24%	30	0.004	1%	30
Liberia	5.9	0.088	38%	23	-0.062	-12%	26	0.013	3%	27
Gabon	5.9	0.147	39%	8	0.081	14%	6	0.114	24%	7
Avg(3-5)*		*0.120*	*47%*		*-0.007*	*-2%*		*0.056*	*16%*	
Tanzania	6.0	0.095	45%	20	-0.065	-11%	27	0.015	4%	26
Lesotho	6.2	0.169	55%	5	-0.009	-1%	18	0.080	17%	12
Kenya	6.2	0.180	71%	4	-0.068	-10%	28	0.056	12%	16
Burkina F.	6.2	0.087	75%	24	-0.022	-4%	20	0.032	9%	22

(cont'd)

[10]These figures should be placed in context. Burundi's high ISC increase (and, consequently, its high I-HDI increase) was solely determined by changes in its peace/stability values (and, consequently, in its Security Index values). The Tutsi-Hutu conflicts which claimed an estimated 200,000 lives in 1972 ensured that Burundi's peace/stability value circa 1970 was 0.000. By 1990, however, the relative peace which existed produced a value of 1.000 - a period difference of +1.000. Accordingly, Burundi's Security Index value rose from 0.472 in 1970 to 0.957 in 1990, and its ISC value rose from 0.319 to 0.563. In short, Burundi's transition from conflict to peace shaped its ISC and I-HDI rates for the period.

(Table 5.18 cont'd)

Country	LoD	HDI INCREASE Absol	Perc	Ra	ISC INCREASE Absol	Perc	Ra	I-HDI INCREASE Absol	Perc	Ra
Ivory Coast	6.4	0.127	52%	11	0.073	13%	8	0.100	25%	8
Mozambiq.	6.5	0.004	2%	36	-0.172	-50%	34	-0.084	-28%	35
Ghana	6.5	0.099	35%	18	-0.080	-14%	29	0.010	2%	29
Cameroon	6.5	0.194	77%	3	-0.031	-5%	21	0.082	19%	11
Rwanda	6.7	0.059	27%	31	-0.003	-1%	15	0.028	8%	25
Malawi	6.7	0.084	48%	25	-0.016	-3%	19	0.034	10%	21
Zaire	6.8	0.106	45%	16	-0.049	-11%	25	0.028	8%	24
Congo	6.8	0.154	50%	6	0.079	14%	7	0.116	26%	6
Chad	6.8	0.077	57%	27	0.088	22%	5	0.082	31%	10
Togo	6.8	0.128	70%	10	-0.007	-1%	16	0.060	15%	14
Angola	6.8	0.076	39%	28	-0.222	-65%	35	-0.073	-27%	34
Cen.Afr.R	6.9	0.053	27%	34	0.056	11%	9	0.054	15%	17
Niger	6.9	0.075	56%	29	0.042	8%	11	0.058	18%	15
Mali	6.9	0.112	110%	14	0.046	9%	10	0.079	27%	13
Burundi	6.9	0.119	76%	12	0.244	76%	1	0.181	76%	2
Benin	7.0	0.099	61%	19	-0.001	-0%	14	0.049	13%	18
Guinea	7.0	0.080	72%	26	-0.008	-2%	17	0.036	12%	20
Somalia	7.0	0.093	75%	21	-0.270	-65%	36	-0.089	-33%	36
Avg(6-7)		*0.103*	*56%*		*-0.018*	*-4%*		*0.043*	*12%*	

Notes. Absol=Absolute Increase; Perc=Percentage Increase; Ra=Rank (regional, Absolute Increase)

Table 5.19 below shows just how poorly most states in this region fared against the records for all developing states (Dev), and against those states beginning the period from similar human development levels (Lev) and income levels (Inc). Only five AFR states (Mauritius, Botswana, Lesotho, Kenya and Cameroon) produced HDI increases above the developing average. A higher proportion (13 of 36, or just over one-third) surpassed the ISC developing average, while only one-quarter (9) surpassed the I-HDI developing average for the period. One-quarter (9) of AFR states crossed their respective HDI Lev thresholds, one-third (12) crossed their respective ISC Lev thresholds, and around one-sixth (7) crossed their I-HDI Lev thresholds. Broadly similar patterns are observed for the Inc thresholds.

Only four states - Mauritius, Botswana, Kenya and Cameroon - surpassed all three of their respective HDI thresholds, eleven states surpassed all three ISC thresholds, and five states (Mauritius, Botswana, Nigeria, Senegal, and Burundi) surpassed all three of their respective I-HDI thresholds. Remarkably, exactly half of all AFR states failed to surpass *even one* threshold (including, it should be noted, democratic Gambia). Two states, Mauritius and Botswana, succeeded in surpassing every threshold.

Only the records of Mauritius and Botswana stand out in this region, and both compare favourably against the top performers from the other regions. Mauritius produced the fourth highest HDI increase among all the states beginning from the Medium HDI level

Table 5.19 Evaluating Human Development Performance (1970-90) Against Threshold Standards, AFR Region

Country	LoD	HDI Increase			ISC Increase			I-HDI Increase		
		Dev	Lev	Inc	Dev	Lev	Inc	Dev	Lev	Inc
Mauritius	2.2	+	+	+	+	+	+	+	+	+
Gambia	2.5	-	-	-	-	-	-	-	-	-
Botswana	3.0	+	+	+	+	+	+	+	+	+
Madagascar	4.6	-	-	-	-	-	-	-	-	-
Uganda	4.9	-	-	-	-	-	-	-	-	-
Zimbabwe	4.9	-	-	-	+	-	+	+	-	-
Nigeria	5.0	-	+	-	+	+	+	+	+	+
Zambia	5.1	-	-	-	-	-	-	-	-	-
Senegal	5.1	-	+	-	+	+	+	+	+	+
South Africa	5.3	-	-	-	-	-	-	-	-	-
Sierra Leone	5.6	-	-	-	-	-	-	-	-	-
Sudan	5.7	-	-	-	-	-	-	-	-	-
Liberia	5.9	-	-	-	-	-	-	-	-	-
Gabon	5.9	-	-	-	+	+	+	+	-	+
Tanzania	6.0	-	-	-	-	-	-	-	-	-
Lesotho	6.2	+	-	+	-	-	-	-	-	+
Kenya	6.2	+	+	+	-	-	-	-	-	-
Burkina F.	6.2	-	-	-	-	-	-	-	-	-
Ivory Coast	6.4	-	+	-	+	+	+	+	-	-
Mozambique	6.5	-	-	-	-	-	-	-	-	-
Ghana	6.5	-	-	-	-	-	-	-	-	-
Cameroon	6.5	+	+	+	-	-	-	-	-	+
Rwanda	6.7	-	-	-	-	-	-	-	-	-
Malawi	6.7	-	-	-	-	-	-	-	-	-
Zaire	6.8	-	-	-	-	-	-	-	-	-
Congo	6.8	-	-	-	+	+	+	+	-	+
Chad	6.8	-	-	-	+	+	+	-	+	+
Togo	6.8	-	+	+	-	-	-	-	-	-
Angola	6.8	-	-	-	-	-	-	-	-	-
Cen. Afr. R.	6.9	-	-	-	+	+	+	-	-	-
Niger	6.9	-	-	-	+	+	+	-	-	-
Mali	6.9	-	-	-	+	-	+	-	+	+
Burundi	6.9	-	+	-	+	+	+	+	+	+
Benin	7.0	-	-	-	-	+	-	-	-	-
Guinea	7.0	-	-	-	-	-	-	-	-	-
Somalia	7.0	-	-	-	-	-	-	-	-	-

Notes. The actual 1970-90 averages were given in Table 5.2 (Dev), Table 5.5 (Lev), Table 5.9 (Inc).
(+) above threshold average; (-) below threshold average.

in 1970 (Table 5.4), and produced the tenth highest HDI and I-HDI increases among all states beginning from the lower-middle income (INC 3) level (Table 5.8). Botswana, on the other hand, produced the highest HDI increase and the third highest I-HDI increase (behind only Indonesia and Jordan) among all states found at the Low index levels in 1970. Among all states found at the poorest income (INC 4) level in 1970, Botswana produced the highest HDI increase, the second highest I-HDI increase (behind Indonesia), and the sixth highest ISC increase.

From the foregoing regional accounts, it has become apparent that some democratic states have performed quite well over the 1970-90 period while some have not. It is perhaps prudent to briefly consider some of the more salient findings specifically relating to the records of developing democracies.

Table 5.20 presents the performance rate increases, in absolute and percentage terms, along with the corresponding regional ranks, for the seventeen democratic states in the sample (listed by region). Five states did particularly well in terms of HDI increases, placing among the top five ranks in their respective regions: Malaysia (0.323 or 69%), Turkey (0.298 or 68%), Colombia (0.259 or 47%), Mauritius (0.254 or 68%), and Costa Rica (0.201 or 31%). Four largely developed LAT democracies (Barbados, Venezuela, Trinidad and Tobago and Jamaica) produced lower incremental increases. Of the remaining eight states, three (Sri Lanka, the Dominican Republic and Honduras) produced what may be termed 'satisfactory' HDI increases (above the developing average of 0.155), while five (India, Papua New Guinea, El Salvador, Peru and Gambia) states produced unsatisfactory results.

Table 5.20 The Performance Rates (1970-90) of Developing Democracies In Perspective

Country	LoD	HDI INCREASE Absol	Perc	Ra	ISC INCREASE Absol	Perc	Ra	I-HDI INCREASE Absol	Perc	Ra
India	1.5	0.128	50%	11	0.091	20%	7	0.109	31%	8
Sri Lanka	1.8	0.159	31%	6	-0.111	-16%	15	0.024	4%	14
Papua NG.	2.1	0.083	26%	15	0.031	4%	11	0.057	11%	13
Malaysia	2.6	0.323	69%	3	0.002	0%	13	0.163	27%	6
Avg(ASI)		*0.173*	*44%*		*0.003*	*2%*		*0.088*	*18%*	
Barbados	1.0	0.070	8%	22	0.053	6%	9	0.062	7%	15
Costa Rica	1.0	0.201	31%	5	-0.035	-4%	16	0.083	11%	12
Venezuela	1.1	0.092	13%	19	-0.065	-8%	17	0.013	2%	19
Trinidad&T	1.8	0.066	8%	23	0.093	12%	5	0.080	10%	13
Jamaica	1.9	0.087	13%	20	-0.034	-4%	15	0.026	4%	18
Domin. Rep.	2.0	0.183	40%	6	-0.014	-2%	13	0.085	15%	10
Colombia	2.1	0.259	47%	1	-0.101	-14%	19	0.079	12%	14
El Salvador	2.6	0.121	29%	14	-0.162	-25%	22	-0.021	-4%	22
Peru	2.8	0.114	22%	16	-0.147	-24%	21	-0.016	-3%	21
Honduras	2.9	0.174	50%	7	0.108	17%	4	0.141	29%	4
Avg (LAT)		*0.137*	*26%*		*-0.030*	*-4%*		*0.053*	*8%*	
Turkey	2.4	0.298	68%	4	-0.101	-17%	12	0.099	19%	11
Mauritius	2.2	0.254	48%	2	0.028	4%	13	0.141	21%	3
Gambia	2.5	0.108	101%	15	-0.035	-5%	23	0.036	10%	19
Avg(AFR)		*0.181*	*75%*		*-0.004*	*-1%*		*0.089*	*16%*	

Notes. Absol=Absolute Increase; Perc=Percentage Increase; Ra=Rank (regional, Absolute Increase)

The picture was less favourable for ISC rates. Only Honduras (0.108 or 17%) and Trinidad and Tobago (0.093 or 12%) could be found among the top five regional ranks. Four states (India, Papua New Guinea, Barbados and Mauritius) produced satisfactory increases (i.e., above the developing average of 0.013), while Malaysia (0.002) essentially remained at the same ISC level by 1990. The ten remaining democracies displayed negative ISC rates over the period, ranging from -0.014 (-2%) for the Dominican Republic to -0.162 (-25%) for El Salvador. The deterioration in social conditions could primarily be blamed on the greater collective insecurity observed by 1990 (due to runaway inflation, socio-political conflict, or both).

Only two states (Honduras and Mauritius) were ranked among the top five for I-HDI increases in their regions. Malaysia actually had a higher absolute I-HDI increase (0.163) but was ranked sixth in Asia. The more incremental increases for Barbados, Costa Rica, Venezuela and Jamaica could be partly explained by their already high I-HDI values in 1970. Of the remaining ten states, three (India, the Dominican Republic and Turkey) produced I-HDI increases above the developing average (0.084), while four (Sri Lanka, Papua New Guinea, Colombia and Gambia) produced relatively modest I-HDI increases. Two conflict-ridden states, El Salvador and Peru, saw their overall human development conditions deteriorate over the period (by -4% and -3%, respectively).

Just how the developing democracies performed against the three threshold standards (Dev, Lev and Inc) may be seen in Table 5.21 (overleaf). Looking across the indices: only Mauritius and Honduras managed to surpass the developing averages for the HDI, ISC and I-HDI; only Mauritius, Barbados and India surpassed their respective HDI, ISC and I-HDI Lev thresholds; and only Mauritius and India surpassed their respective HDI, ISC and I-HDI Inc thresholds. The results were slightly more encouraging when viewed by index: five states (Malaysia, Costa Rica, Colombia, Turkey and Mauritius) exceeded all three of their respective HDI thresholds; six states (India, Papua New Guinea, Barbados, Trinidad and Tobago, Honduras and Mauritius) exceeded all three of their respective ISC thresholds; and four states (India, Malaysia, Honduras and Mauritius) exceeded all three of their respective I-HDI thresholds. Perhaps most tellingly of all, only Mauritius managed to exceed every index threshold; it will be recalled that this feat was accomplished by six non-democratic (3-5*) states (South Korea, Thailand, Indonesia, Panama, Brazil and the UAE) and seven non-democratic (6-7) states (China, Chile, Egypt, Tunisia, Syria, Algeria and Libya).

Table 5.21 Evaluating Human Development Performance (1970-90) of Developing Democracies Against Threshold Standards

Country	LoD	HDI Increase			ISC Increase			I-HDI Increase		
		Dev	Lev	Inc	Dev	Lev	Inc	Dev	Lev	Inc
India	1.5	-	+	+	+	+	+	+	+	+
Sri Lanka	1.8	+	-	-	-	-	-	-	-	-
Papua NG.	2.1	-	-	-	+	+	+	-	-	-
Malaysia	2.6	+	+	+	-	-	-	+	+	+
Barbados	1.0	-	+	-	+	+	+	-	+	-
Costa Rica	1.0	+	+	+	-	-	-	-	+	-
Venezuela	1.1	-	-	+	-	-	-	-	-	-
Trinidad & T.	1.8	-	-	-	+	+	+	-	+	-
Jamaica	1.9	-	-	-	-	-	-	-	-	-
Domin. Rep.	2.0	+	-	-	-	-	-	+	-	-
Colombia	2.1	+	+	+	-	-	-	-	-	-
El Salvador	2.6	-	-	-	-	-	-	-	-	-
Peru	2.8	-	-	-	-	-	-	-	-	-
Honduras	2.9	+	-	-	+	+	+	+	+	+
Turkey	2.4	+	+	+	-	-	-	+	-	-
Mauritius	2.2	+	+	+	+	+	+	+	+	+
Gambia	2.5	-	-	-	-	-	-	-	-	-

Notes. The actual 1970-90 averages were given in Table 5.2 (Dev), Table 5.5 (Lev), Table 5.9 (Inc).
(+) above threshold average; (-) below threshold average.

5.5 Summary of Chapter Findings

The findings in this chapter confirm that there is no general relationship between levels of democracy and human development performance. Specifically, it has been shown that the correlations between levels of democracy and improvements in human development conditions were extremely weak, particularly among developing states (Table 5.1). To further demonstrate the lack of any general patterns between the variables, it was shown that the average level of democracy consistently remained within a narrow range across rank performance groups (Figure 5.1).

In the absence of controlling variables, democratic states produced modest rate increases, whereas non-democratic states produced either very high or very low - and sometimes negative - rates (Figure 5.2). When the average performance rates of the three LoD groups were directly compared, democratic states displayed slightly worse records

than the non-democratic (3-5*) states and, less often, the non-democratic (6-7) states (Figure 5.3). Moreover, in the absence of controlling variables, democracies in the developing world performed no differently than their non-democratic counterparts in terms of HDI rates, but performed worse in terms of ISC and, most importantly, I-HDI rates (Table 5.2).

There is a general relationship between the levels and rates of human development for the HDI and I-HDI (but not for the unpredictable ISC), inverted 'U' patterns suggest that the highest average performance rates are to be found at the lower-middle range of index values, while the lowest rates are to be found at either end of the index scales (Figure 5.4). There is, therefore, a need to control for index levels. Accordingly, when similar index levels were controlled for, the non-democratic (3-5*) states performed only marginally better than democratic states at the one index level (Medium) where comparisons were meaningful (Figures 5.5, 5.6, 5.7, and Tables 5.3 and 5.4). On a proportional basis, the non-democratic (3-5*) states also produced slightly more 'above average' performers in the developing world in terms of HDI, ISC and I-HDI rates (Table 5.5).

There is also a general relationship between human development performance and levels of economic development: the highest rate increases are usually produced by middle-income states (Figure 5.8). Taking this into account, when levels of economic development were controlled for, democratic states did not, on average, appear to perform as well as non-democratic (3-5*) states (Table 5.6). However, when index levels were factored into the analysis, meaningful comparisons could only be made at two income levels (Figure 5.9). Here, democratic and non-democratic states displayed broadly similar performance rates at the upper-middle income level, but democratic states displayed worse records at the lower-middle income level (Tables 5.7 and 5.8). On a proportional basis, developing democracies displayed fewer 'above average' rate increases, relative to their income levels, than the two non-democratic groups of states (Table 5.9).

Human development performance varied greatly by region: the highest average performance rates were produced by the MID region, the lowest were produced by the AFR region (Figure 5.10). Across the regions, no LoD group consistently produced the highest average increases irrespective of index and period, although the most authoritarian (6-7) states appeared to display the best overall record (Table 5.10). More non-democratic (6-7) states, proportionally, displayed higher increases, relative to the regional averages, than did the democratic states, although the differences were not great and varied by index (Table 5.11). Judging from the more detailed regional overviews (Figures 5.11-5.14, Tables 5.12-5.20), one could argue that, to varying degrees, democratic states did not perform as well as non-democratic states in the ASI, LAT and MID regions; the record of the democratic states in the AFR region was mixed. Few developing democratic states consistently displayed 'above average' performance records when compared against the various threshold averages (Table 5.21).

CHAPTER 6
A CLOSER LOOK AT THE DEVELOPING WORLD: DEMOCRACY AND SELECTED SOCIAL INDICATORS, 1970-1990

Thus far, the democracy-development relationship has been explored using three composite measures, the HDI, ISC and I-HDI. This chapter will present data pertaining to 'basic' indicators such as literacy rates, life expectancy rates, gender equity rates, etc, which have been subsumed by their respective composite measures,[1] focusing on the developing world over the 1970-90 period. Continuing the investigation into the dual nature of the relationships explored in Chapters 4 and 5, the first part of the chapter will examine the findings concerning democracy and social indicator levels, whereas the second part will consider the findings on democracy and selected indicator performance rates.

6.1 Democracy and Selected Indicator Levels

In the sections to follow it will be shown that, by and large, the observations made in Chapter 4 regarding the composite indices also hold for the individual indicators. Specifically, it will be argued that: (1) while there is a general relationship between democracy and higher indicator levels, this relationship is not automatic and varies by indicator; (2) the level of economic development serves as the crucial intervening variable, although democratic states, whether wealthy or poor, still display the highest average indicator rates; and (3) regional variations matter - democratic states do not always display the highest average indicator rates within every developing region.

General Patterns

It will be recalled that, regarding the sample of developing states, democracy is *moderately* correlated with higher individual capabilities (HDI), better social conditions (ISC), and higher overall human development (I-HDI) values (r^2 values explain 16-30% - see Table 4.1 in Chapter 4). It will also be remembered that, whereas there is no observable relationship between democracy and levels of economic development in the developing world, a moderate relationship does exist between levels of economic

[1]The rationale behind the construction of the composite indices was described in Chapter 3 (refer also to the Technical Notes). The two key measures of individual capabilities which feature in the UNDP's Human Development Index and in Morris' Physical Quality of Life Index, adult literacy and life expectancy, will be considered, along with the three sub-indices - Liberty Index, Security Index, Mobility Index, and their respective constituent indicators (civil liberties and child survival rates for the LIB Index, peace/stability and inflation rates for the SEC Index, and tertiary enrollment, gender equity and % of non-agricultural employment rates for the MOB Index) - which together comprise the Index of Social Conditions (ISC).

development and human development (Table 4.5). In order to properly distinguish which of these, democracy or economic development, explains more of the variation in indicator levels, Table 6.1 presents the correlations (N=88 developing states) between the individual indicators and democracy (left panel), and between the indicators and economic development (right panel).

Table 6.1 Correlations Involving Selected Indicators and Levels of Democracy, Economic Development (1970 and 1990)

Indicator		Level of Dem (LoD) 1970	1990	Econ Dev (GDP/C) 1970	1990
Literacy	r=	-0.534	-0.558	0.251	0.361
	r^2=	0.285	0.312	0.063	0.131
Life Expectancy	r=	-0.445	-0.509	0.496	0.516
	r^2=	0.198	0.259	0.246	0.266
Child Survival (SURV)	r=	-0.428	-0.475	0.456	0.475
	r^2=	0.183	0.225	0.208	0.226
Civil Liberties	r=	0.755	0.885	-0.159	-0.166
	r^2=	0.570	0.783	0.025	0.028
LIB Index	r=	-0.748	-0.836	0.324	0.320
	r^2=	0.559	0.699	0.105	0.102
Peace/Stability (CONF)	r=	-0.068	-0.091	0.184	0.089
	r^2=	0.005	0.008	0.034	0.008
Inflation	r=	-0.068	-0.156	0.162	-0.074
	r^2=	0.005	0.024	0.026	0.006
SEC Index	r=	-0.023	0.105	0.074	0.205
	r^2=	0.001	0.011	0.006	0.042
Tertiary Enrol.	r=	-0.431	-0.502	0.237	0.302
	r^2=	0.186	0.252	0.056	0.091
Gender Equity	r=	-0.459	-0.417	0.160	0.480
	r^2=	0.211	0.174	0.026	0.231
%NAgr	r=	-0.343	-0.431	0.645	0.584
	r^2=	0.118	0.186	0.416	0.341
MOB Index	r=	-0.462	-0.496	0.541	0.553
	r^2=	0.214	0.246	0.293	0.306

The level of democracy is strongly correlated with only two of the twelve indicators, the civil liberties measure (the positive signs arise because, like LoD values, CL values use an inverted scale) and the Liberty Index (the negative signs indicate that higher LIB values correspond to lower, i.e. more democratic, LoD values). Moderate and negative correlations are found for seven indicators: adult literacy, life expectancy, child

survival, tertiary enrollment, gender equity, % non-agriculture employment, and the Mobility Index. The only broad area of human development where levels of democracy have no observable impact is 'security': the correlations are extremely weak between democracy and the Security Index, and between democracy and its two constituent indicators, inflation and peace/stability.

Democracy is thus associated, albeit to different degrees, with higher levels of 'individual capabilities' (adult literacy and life expectancy), 'liberty' (civil liberties, child survival, and the Liberty Index), and 'social mobility' (tertiary enrollment, gender equity, % non-agricultural employment, and the Mobility Index), but there is no relationship between democracy and levels of 'security' (inflation, peace/stability, and the Security Index). Furthermore, it is apparent that, aside from the predictable cases of civil liberties and the Liberty Index, the explanatory potential of democracy is not great: when averaged out for both dates, the r-squared values range from a high of 30% (adult literacy) to a low of 0.06% (Security Index). This modest explanatory potential also suggests, of course, that there were tremendous variations in indicator rates within and across each level of democracy for both dates (Table 6.2 overleaf).[2]

The level of economic development, by contrast, shows moderately-strong positive correlations with one indicator, % non-agricultural employment, and moderate correlations with three indicators, life expectancy, child survival, and the Mobility Index. The relationship between economic development and gender equity is unclear: very weak correlations are found for 1970 and moderate correlations are found for 1990. Somewhat surprisingly, economic development has very little impact on the remaining seven indicators: literacy, civil liberties, the Liberty Index, peace/stability, inflation, the Security Index, and tertiary enrollment.

Looking down the table, it is fairly apparent that the level of democracy and the level of economic development have similar explanatory potential in the developing world. In fact, the two variables may explain roughly the same amount of variation in six of the twelve indicators: life expectancy, child survival, peace/stability, inflation, the Security Index and the Mobility Index. The two variables also explain as much of the variation in gender equity rates for 1990, although the level of democracy explains more

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[2]Undoubtedly, there were states with good and bad records *within* each LoD group: a wide gulf in adult literacy rates in 1970 separated the two democratic states, Barbados (99%) and Gambia (6%), just as one separated the two non-democratic (3-5*) states, Argentina (93%) and Somalia (3%), and the two non-democratic (6-7) states, Cuba (87%) and Niger (4%). Very little also separated the best/worst states *across* the levels of democracy: in terms of life expectancy in 1990, democratic Costa Rica and non-democratic Cuba shared the same rate (76 years), while the worst records in their respective LoD groups were separated by only 2 years (Gambia at 44 years, Sierra Leone at 42 years). The obvious example provided by the peace/stability (CONF) index captures both phenomena to an extreme degree: the values ranged from the absolute maximum of 1.000 (complete peace/stability) to the absolute minimum of 0.000 (complete instability) *for each level of democracy* in 1970 and 1990. Notions of 'stability' and 'instability' are no more the exclusive domains of any particular level of democracy than are 'literacy' and 'illiteracy'.

Table 6.2 Variations In Indicator Rates By Level of Democracy, 1970 and 1990

Indicator	Status	1970 Level of Democracy 1-2*	3-5*	6-7	1990 Level of Democracy 1-2*	3-5*	6-7
Literacy (%)	Highest	99 (Barbad.)	93 (Argent)	87 (Cuba)	100 (Barb)	94 (Chile)	95 (Cuba)
	Lowest	6 (Gambia)	3 (Somal.)	4 (Niger)	36 (Gamb)	27 (Nepal)	20 (BurkF)
Life Expect. (years)	Highest	69 (2 dif)	70 (HongK)	71 (Cuba)	76 (CostaR)	77 (HongK)	76 (Cuba)
	Lowest	35 (Gamb.)	34 (Sierr.L)	36 (2dif)	44 (Gamb)	43 (Ugand)	42 (SierrL)
ChildSurv. (%)	Highest	96 (Trinid)	98 (HongK)	95 (Cuba)	99 (Barbad)	99 (HongK)	99 (Cuba)
	Lowest	68 (Gamb)	65 (Afghan)	64 (Mali)	76 (Gamb)	79 (Liberia)	70 (Mozam)
Civil Lib (1.0-7.0)*	Best	1.0 (2 dif)	2.0 (HongK)	3.0 (2dif)	1.0 (3 dif)	2.0 (HongK)	3.7 (Tunis.)
	Worst	4.0 (3 dif)	6.0 (5 dif)	7.0 (10 dif)	4.7 (SriLa)	6.3 (Sudan)	7.0 (3 dif)
LIB Index (1.0-0.0)**	Highest	0.946(Barb)	0.893(Hong)	0.691(Ecua)	0.985(Barb)	0.909(Hong)	0.709(Tun.)
	Lowest	0.527(Bang)	0.315(Soma)	0.191(Guin)	0.651(Gam)	0.383(Suda)	0.208(Ang)
CONF (1.0-0.0)**	Highest	1.000(8dif)	1.000(19dif)	1.000(29dif)	1.000(18dif)	1.000(10dif)	1.000(24dif)
	Lowest	0.000(2dif)	0.000(2dif)	0.000(11dif)	0.000(2dif)	0.000(3dif)	0.000(5dif)
Inflation (%)	Best	-0.3 (Malay)	0.3 (Guat)	-1.0 (China)	5.2 (2diff)	1.1 (UAE)	-2.7 (Kuw)
	Worst	51.0 (Urug)	46.1 (Braz)	63.0 (Indon)	416.9 (Arg)	583.7 (Nic)	707.0(Ang)
SEC Index (1.0-0.0)**	Highest	0.987(Vene)	0.994(Kuw)	1.000(Iran)	0.948(2dif)	0.989(UAE)	0.996(Cong)
	Lowest	0.370(Chile)	0.460(Nig.)	0.000(Indo)	0.262(Peru)	0.165(Suda)	0.000(Ang)
Tert Enrol. (Rates %)	Highest	11.3 (Urug)	19.8 (Phil)	9.8 (Syria)	39.9 (Arge)	20.9 (Pana)	21.7 (Jorda)
	Lowest	0.1 (Gamb)	0.0 (BurkF)	0.0 (Chad)	0.7 (Gamb)	1.1 (Ugan)	0.2 (Moza)
GEND (1.0-0.0)**	Highest	0.728(Barb)	0.474(Phil)	0.488(China)	0.900(Barb)	0.724(Hong)	0.854(Cuba)
	Lowest	0.110(Bang)	0.052(Afgh)	0.062(Saudi)	0.261(PNG)	0.121(Bang)	0.091(Afgh)
NAgr (%)	Highest	85 (Urug)	98 (Kuw)	66 (Jord)	95 (Urug)	100 (Sing)	99 (Kuw)
	Lowest	14 (Bang)	10 (2dif)	6 (Nepal)	16 (Gamb)	7 (Nepal)	8 (Buru)
MOB Index (1.0-0.0)**	Highest	0.532(Urug)	0.506(Sing)	0.339(Cuba)	0.704(SKor)	0.650(Hong)	0.630(Cuba)
	Lowest	0.093(Bang)	0.081(Afgh)	0.066(Mali)	0.160(Gamb)	0.142(Nepal)	0.092(Mali)

Notes: *Civil Liberties range from 1.0 (most rights) to 7.0 (fewest/no) rights
**Scale ranges from 1.000 (highest) to 0.000 (lowest)
dif=different states

of the variation for 1970. The only indicator which is more strongly associated with economic development is the % of non-agricultural employment. Democracy is more strongly associated with adult literacy, civil liberties and the Liberty Index.

Comparing Average Indicator Rates: Controlling For Economic Development

On the basis of the correlations, and recalling that democratic states displayed the highest average HDI, ISC and I-HDI values (Figure 4.3 in Chapter 4), even after

controlling for similar levels of economic development (Table 4.8, Figure 4.7), one would expect that the developing democracies would exhibit the highest average indicator rates. Using data for two separate dates (1970 and 1990), Table 6.3 (overleaf) confirms that this is the case. Developing states were first divided into the wealthiest (INC 1 and 2) and poorest (INC 3 and 4) samples for the date in question, and then further separated according to their LoD values.[3]

In the vast majority of cases, democratic states displayed the highest indicator averages for both dates and across both samples (wealthy and poor), with the notable exception of the security indicators. A further general point worth making concerns the impact of economic development: the evidence suggests that, *irrespective of the level of democracy*, wealthy developing states consistently displayed higher indicator averages than poor developing states. A more detailed examination of each set of indicators will now ensue.

•Individual Capabilities Measures: Adult Literacy, Life Expectancy

Among wealthy and poor states alike, developing democracies consistently showed the highest average literacy rates, although the gaps were especially pronounced within the wealthy group. In both 1970 and 1990, the wealthy democracies contained almost universally literate populations: four of the seven states showed literacy rates of 90% or more in 1970 (with Chile and Costa Rica just slightly below at 89% and 88%), down to a low of 75% for Venezuela; and six of the eleven democracies in 1990 surpassed the 90% plateau (with Mexico and Venezuela at 89%), down to 82% for Brazil, 80% for Mauritius and 75% for Botswana. Taking the low democratic figure of 75%

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[3]The exact breakdown of developing states (N=88) is as follows:
1970 INC 1&2 (GDP/C $388-4922)
LoD 1.0-2.9 (N=7): Barbados, Jamaica, Venezuela, Chile, Costa Rica, Trinidad & Tobago, Uruguay
LoD 3.0-5.9 (N=9): Argentina, Hong Kong, Panama, South Africa, Mexico, Peru, Singapore, Kuwait, Brazil
LoD 6.0-7.0 (N=9): Gabon, Iran, Zambia, Saudi Arabia, Libya, UAE, Cuba, Guinea, Iraq
INC 3&4 (GDP/C $54-378)
LoD 1.0-2.9 (N=7): Sri Lanka, Malaysia, Bangladesh, Gambia, India, Colombia, Turkey
LoD 3.0-5.9 (N=20): Dom.Rep., Guatemala, Mauritius, Philippines, Botswana, Sierra Leone, S. Korea, Paraguay, El Salvador, Nicaragua, Papua NG, Lesotho, Bolivia, Cameroon, Somalia, Burkina Faso, Madagascar, Nigeria, Pakistan, Afghanistan.
LoD 6.0-7.0 (N=36): Ecuador, Ghana, Morocco, Senegal, Zimbabwe, Chad, Indonesia, Kenya, Algeria, Congo, Egypt, Ivory Coast, Jordan, Liberia, Tunisia, Uganda, Benin, Nepal, Niger, Sudan, Tanzania, Zaire, Honduras, Syria, Thailand, Angola, Burundi, Central Afr.Rep.,China, Haiti, Malawi, Mozambique, Myanmar, Rwanda, Togo.
1990 INC 1&2 (GDP/C $1807-26894)
LoD 1.0-2.9 (N=11): Barb., Venez., C.Rica, Trin.&Tob., Argent., Uruguay, S.Korea, Mauritius, Botsw., Brazil, Mexico
LoD 3.0-5.9 (N=10): Malaysia, Panama, H.Kong, Singapore, Chile, Iran, UAE, Gabon, Algeria, S.Africa
LoD 6.0-7.0 (N=5): Kuwait, Saudi Arabia, Libya, Cuba, Iraq
INC 3&4 (GDP/C $84-1600)
LoD 1.0-2.9 (N=14): Dominican Rep., India, Bolivia, Ecuador., Honduras, Jamaica., PapuaN.G, Turkey, Peru, Philippines., Colombia., Sri Lanka., El Salvador, Gambia
LoD 3.0-5.9 (N=15): Guatemala, Uganda, Nigeria, Senegal, Bangladesh, Pakistan, Paraguay, Sudan, Zimbabwe, Nepal, Liberia, Morocco, Nicaragua, Thailand, Madagascar
LoD 6.0-7.0 (N=33): Ghana, Chad, Indon., Kenya, Congo, Egypt, Ivory Coast, Jordan, Liberia, Tunisia, Benin, Niger, Cameroon, Tanzania, Zaire, Syria, Angola, Burundi, Central Afr.Rep., China, Haiti, Malawi, Mozambique., Myanmar, Rwanda, Togo, Guinea, Sierra Leone, Lesotho, Burkina Faso, Afghanistan, Somalia, Mali.

Table 6.3 Average Indicator Rates By Level of Democracy, Controlling For Economic Development

Indicator	Year	WEALTHY (INC 1&2) Level of Democracy 1-2*	3-5*	6-7	POOR (INC 3&4) Level of Democracy 1-2*	3-5*	6-7
Literacy	1970	90	70	35	47	44	31
(%)	1990	90	78	72	77	55	52
Life Expect.	1970	66	62	53	53	49	46
(years)	1990	70	68	70	64	57	52
ChildSurv.	1970	94	92	83	83	80	78
(%)	1990	96	95	93	90	86	83
Civil Lib	1970	2.1	4.2	6.1	3.0	4.1	5.7
(1.0-7.0)*	1990	2.1	4.3	6.3	3.1	4.3	5.8
LIB Index	1970	0.842	0.647	0.400	0.662	0.549	0.393
(1.0-0.0)**	1990	0.866	0.671	0.488	0.728	0.585	0.433
CONF	1970	0.914	0.943	0.863	0.591	0.764	0.710
(1.0-0.0)**	1990	1.000	0.778	0.560	0.703	0.655	0.829
Inflation	1970	14	10	7	5	4	6
(%)	1990	87	7	1	56	57	37
SEC Index	1970	0.814	0.872	0.861	0.748	0.840	0.800
(1.0-0.0)**	1990	0.743	0.814	0.758	0.613	0.647	0.749
Tert Enrol.	1970	8	7	2	3	4	2
(Rates %)	1990	20	12	15	13	6	4
GEND	1970	0.489	0.371	0.182	0.287	0.243	0.243
(1.0-0.0)**	1990	0.611	0.572	0.533	0.457	0.315	0.324
NAgr	1970	74	74	47	35	32	28
(%)	1990	83	79	79	56	35	33
MOB Index	1970	0.445	0.401	0.228	0.225	0.204	0.182
(1.0-0.0)**	1990	0.568	0.506	0.508	0.400	0.248	0.236

Notes: *Civil Liberties range from 1.0 (most rights) to 7.0 (fewest/no) rights
**Scale ranges from 1.000 (highest) to 0.000 (lowest)

(Venezuela) for 1970 as a basis of comparison, it is interesting to note that six of the nine wealthy non-democratic (3-5*) states displayed lower literacy rates, from Mexico (74%) to South Africa (46%). The deplorably low average literacy rate (35%) for the wealthy non-democratic (6-7) states in 1970 can be explained by the fact that eight of the nine states had literacy rates well below the 75% mark, from Zambia (52%) down to Saudi Arabia (9%); the sole exception was Cuba (87%).

The democracies in the sample of poor states also displayed the highest average literacy rates for both dates. However, the average figure of 47% in 1970 meant that the majority of inhabitants in the poor democracies were illiterate. Only two democracies had somewhat decent literacy rates at this date, Colombia (78%) and Sri Lanka (77%), and three states had woefully low literacy rates - India (34%), Bangladesh (24%) and Gambia (6%). A different picture had emerged by 1990, with some literate non-democratic states becoming democratic (e.g. Ecuador) and some formerly wealthy democracies (e.g. Jamaica) falling into the lower income categories: eight of the fourteen poor democracies had literacy rates above 80% (from Jamaica at 99% to Turkey at 82%); only three democracies continued to have unsatisfactory rates - Papua New Guinea (65%), India (50%) and Gambia (36%).

On the basis of the average life expectancy rates, it is valid to claim that, irrespective of level of economic development, people in democracies could expect to live longer than those in non-democratic states. Among the richest developing states in 1970, the average rates were 66 years (LoD 1-2*), 62 years (LoD 3-5*) and 53 years (LoD 6-7). The variations in life expectancy rates were considerable: whereas only eight years separated the top (Barbados and Uruguay at 69) and bottom democracies (Chile at 61), 18 years separated the top and bottom non-democratic (3-5*) states (Hong Kong at 70, Peru and South Africa at 52) and 35 years separated the top and bottom non-democratic (6-7) states (Cuba at 71, Guinea at 36). In 1990, however, the gap in life expectancy rates among democratic states stood at 16 years (Costa Rica at 76, Botswana at 60), a reflection of the changing composition of the group; the gaps were 24 years among non-democratic (3-5*) states (Hong Kong at 77, Gabon at 53) and 14 years among non-democratic (6-7) states (Cuba at 76, Libya at 62). The almost identical average rates for 1990 - 70 years for both the democratic and non-democratic (6-7) states, 68 years for the non-democratic (3-5*) states - concealed the distributional imbalances among the LoD groups: nine of the eleven wealthy democracies (excluding only Brazil and Botswana) surpassed the benchmark of 70 years, compared to six of the ten non-democratic (3-5*) states (Hong Kong, Singapore, Panama, Chile, UAE and Malaysia) and two of the five non-democratic (6-7) states (Cuba and Kuwait).

Democratic states in the poor sample also produced the highest average life expectancy rates: 53 years in 1970, compared to 49 years for the non-democratic (3-5*) states and 46 years for the non-democratic (6-7) states; and 64 years in 1990, compared to 57 years for non-democratic (3-5*) states and 52 years for non-democratic (6-7) states. Once again, there were sizeable discrepancies within each LoD group: among democracies, from 65 years (Sri Lanka) to 35 years (Gambia) in 1970, and 73 years (Jamaica) to 44 years (Gambia) in 1990; among non-democratic (3-5*) states, from 65 years (Paraguay) to 34 years (Sierra Leone) in 1970, and 69 years (Thailand) to 43 years (Uganda) in 1990; among non-democratic (6-7) states, from 60 years (China) to 36 years

(Angola) in 1970, and 71 years (China) to 42 years (Sierra Leone) in 1990. As testimony to the influence of economic development, a person in a poorer democracy could have expected to live an average of 13 fewer years (53) than a person in a wealthier democracy (66) in 1970 (this gap stood at 6 years in 1990); similar observations may be made for the non-democratic states.

• *'Liberty' Indicators: Child Survival, Civil Liberties, The Liberty Index*

The measure of social deprivation, the child survival rate, showed that, on average, a larger percentage of children reached the age of five in developing democracies, a fact confirmed for both dates and for both samples. In the wealthiest group, 94% of children in democratic states could be expected to reach the age of five in 1970, compared to 92% in non-democratic (3-5*) states and only 83% in non-democratic (6-7) states. The rates were better for all three LoD groups in 1990: 96% in democratic states, 95% in non-democratic (3-5*) states and 93% in non-democratic (6-7) states. The range of child survival rates was narrowest for democratic states: from 95.8% (Trinidad and Tobago) to 89.5% (Chile) in 1970, and from 98.5% (Barbados) to 91.3% (Botswana) in 1990; differences of 6.3% (1970) and 7.2% (1990). Conversely, the larger rate fluctuations among non-democratic states underlined the inconsistency of their records: among non-democratic (3-5*) states, the differences were 14.2% in 1970 (Hong Kong at 97.6%, Peru at 83.4%) and 15.9% in 1990 (Hong Kong at 99.2%, Gabon at 83.3%); among non-democratic (6-7) states, the differences were 25.5% in 1970 (Cuba at 94.6%, Guinea at 69.1%) and 10.2% in 1990 (Cuba at 98.6%, Libya at 88.4%).

A greater percentage of children living in the poor democracies reached the age of five, although the survival rates (83% in 1970 and 90% in 1990) were considerably lower than the rates for the wealthy democracies (94% and 96%). Two (Malaysia and Sri Lanka) of the seven poor democracies crossed the benchmark survival rate of 90% in 1970, compared to three (South Korea, Mauritius, Paraguay) non-democratic (3-5*) states (of a total of 20), and two (Thailand and China) non-democratic (6-7) states (of a total of 36). More democracies (9 of 14), proportionately, also displayed rates of 90%+ in 1990; one-third (5 of 15) of non-democratic (3-5*) states and roughly one-fifth (7 of 33) of non-democratic (6-7) states surpassed the 90% mark. However, the rate fluctuations within all three LoD groups were quite similar: among democratic states, 25.9% in 1970 (Malaysia at 93.7%, Gambia at 67.8%) and 22.0% in 1990 (Jamaica at 97.9%, Gambia at 75.9%); among non-democratic (3-5*) states, 27.8% in 1970 (South Korea at 92.9%, Afghanistan at 65.1%) and 17.1% in 1990 (Thailand at 96.5%, Liberia at 79.1%); among non-democratic (6-7) states, 26.1% in 1970 (Thailand at 90.3%, Mali at 64.2%) and 25.4% in 1990 (China at 95.7%, Mozambique at 70.3%).

Predictably, the patterns were much more clear-cut with respect to civil liberties (CL): democracies produced by far the highest average CL rates in both samples. Perhaps the most interesting point worth noting here is that, as the median point of the CL scale is 3.5 (from the best value of 1.0 to the worst value of 7.0), one could argue that civil liberties among the poor democracies were, on average, 'not bad' (3.0-3.1), as opposed to 'fairly good' (2.0) for wealthy democracies. For example, there were only two wealthy democracies in 1970 with CL rates worse than one might expect given their LoD values - Trinidad and Tobago (LoD 1.5, CL 3.0) and Uruguay (LoD 2.0, CL 4.0) - compared to five poor democracies where this was the case - Sri Lanka (LoD 1.5, CL 3.0), Malaysia (LoD 2.0, CL 3.0), Bangladesh (LoD 2.0, CL 4.0), India (LoD 2.0, CL 3.0) and Turkey (LoD 2.5, CL 4.0). Only 2 of the 11 wealthy democracies (South Korea and Mexico) exhibited worse-than-expected CL values (3.0 or more) in 1990, compared to 9 of the 14 poor democracies (the worst of these offenders were embroiled in domestic conflicts, especially Turkey, Peru, Colombia, Sri Lanka and El Salvador).

Since child survival rates and CL values were, on average, higher for democratic states, it stood to reason that democracies would also display considerably higher average LIB values. There were, however, some discrepancies across and within the LoD groups. One wealthy non-democratic (3-5*) representative, Hong Kong, displayed a slightly below average CL value (4.0) in 1970, accompanied by an excellent child survival rate (97.6%). Its LIB value (0.893) for 1970 suggested that Hong Kong provided greater overall 'freedom' than five of the seven wealthy democracies (Jamaica at 0.861, Venezuela at 0.849, Chile at 0.812, Trinidad and Tobago at 0.791, and Uruguay at 0.697). Nor was this phenomenon confined to the sample of wealthy states: despite possessing an LoD value (3.0) which placed it only marginally outside the democratic group in 1970, Mauritius had a higher LIB value (0.840) than any poor democracy (ahead of Colombia at 0.800 and Malaysia at 0.770). Likewise, there were noticeable variations in LIB values within each LoD group. Taking c1970 as the reference date, LIB values ranged from: 0.946 (Barbados) to 0.527 (Bangladesh) among democratic states; 0.893 (Hong Kong) to 0.315 (Somalia) among non-democratic (3-5*) states; and 0.579 (UAE) to 0.191 (Guinea) among non-democratic (6-7) states. Because of their superior child survival rates and CL values, wealthy democracies had higher average LIB values (0.842 and 0.866) than poor democracies (0.662 and 0.728) for both dates.

• *'Security' Indicators: Peace/Stability, Inflation, The Security Index*

The three measures of security do not permit any generalizations regarding levels of democracy (recall the extremely low r-squared values in Table 6.1). Indicatively, the highest average peace/stability (CONF) rate varied for each date and between the two samples. In the sample of wealthy states, democracies had a slightly lower average

(0.914) than the non-democratic (3-5*) states (0.943) in 1970, but a perfect score of 1.000 (i.e., all eleven democracies were at complete 'peace') in 1990, compared to averages of 0.778 for the non-democratic (3-5*) states and 0.560 for the non-democratic (6-7) states.

Conversely, the relatively worse average peace/stability rate for the poor democracies (0.560) circa 1970 was attributable to the hostilities which embroiled India and the new state of Bangladesh (rendering each a CONF value of 0.000); and, to a lesser degree, to the conflicts in Sri Lanka (0.640), Turkey (0.720), and Malaysia (0.780). The average rate for the poor democracies was better in 1990 (0.703), but still less than the average for the non-democratic (6-7) states (0.829). Of the fourteen poor democracies, seven experienced conflict of one sort or another: Colombia (0.692), Turkey (0.651), Peru (0.524), Sri Lanka (0.361), the Philippines (0.347), India (0.264) and El Salvador (0.000). On the whole, the LoD groups contained similar percentages of largely peaceful/stable states (0.900/1.000); the numbers per LoD group (1-2*, 3-5*, 6-7) were: 57%, 66% and 64% in 1970; and 72%, 40% and 63% in 1990. Moreover, the percentages of completely strife-torn/unstable states (0.000/0.299) from each LoD group were largely indistinguishable: 14%, 7% and 22% in 1970; and 8%, 12% and 13% in 1990.

Nor do the average inflation rates differentiate the LoD groups. Although wealthy democracies had the dubious distinction of exhibiting the highest rates, runaway inflation was a problem for a handful states only - primarily in Latin America,[4] thereby suggesting a general regional malaise which raised overall averages to misleadingly high levels (e.g. 87% among the wealthy democracies in 1990). The somewhat unstable cases of Chile (33.0%) and Uruguay (51.0%) skewed the 1970 average (14%), despite the fact that five of the seven wealthy democracies had rates under 10%. The non-democratic states also had their share of economic instability at this date: Argentina (21.4%) and Brazil (46.1%) among the non-democratic (3-5*) states, and the UAE (33.9%) among the non-democratic (6-7) states. More democracies struggled with runaway inflation by 1990: only four (Barbados, South Korea, Trinidad and Tobago and Mauritius) managed to keep their rates below 10%, while Uruguay (64.4%), Mexico (66.5%), Brazil (327.6%) and Argentina (416.9%) proved to be extremely unstable. The worst rates belonged to Chile (20.5%) among non-democratic (3-5*) states and to Iraq (10.3%) among non-democratic (6-7) states.

Inflation rates were largely kept in check by almost all states in the poor sample for 1970, as witnessed by the low and largely indistinguishable averages: 5% (LoD 1-2*), 4% (LoD 3-5*), and 6% (LoD 6-7). Six of the seven poor democracies displayed rates below 10% (the exception being Colombia at 11.9%). By 1990, however, runaway

[4]Latin America had the worst regional inflation averages for both dates (especially in 1990). The averages for each region were: 8.3% (ASI), 9.6% (LAT), 5.5% (MID), and 4.3% (AFR) in 1970; and 9.0% (ASI), 98.6% (LAT), 9.1% (MID), and 38.3% (AFR) in 1990 (this last figure, for sub-Saharan African states, was misleading in that it includes one uncharacteristically poor rate, 707.0% for Angola). To place the 1990 figure for Latin America into further context, 15 of the 23 states had inflation rates of 20.0% or more, including five states with rates over 200%: Bolivia, Peru, Brazil, Argentina, and Nicaragua.

inflation had plagued the poor developing states as well. Only 3 of the 14 poor democracies (Papua New Guinea, Honduras and India) had rates below 10%, while six had rates of 25% or higher (the worst being Bolivia at 263.4% and Peru at 287.3%). The worst rates among non-democratic states were produced by war-ravaged countries: Uganda (107.0%) and Nicaragua (583.7%) among non-democratic (3-5*) states; Angola (707.0%) among non-democratic (6-7) states.

One could therefore account for the marginally lower average Security Index (SEC) values for the democratic states (both samples) by pointing to the lower peace/stability averages produced by the poor democracies and the worse inflationary records of the wealthy democracies. In reality, the enormous range of SEC values within each LoD group renders any generalizations meaningless. Indeed, within the wealthy sample, SEC values ranged: among democratic states, from 0.987 (Venezuela) to 0.370 (Chile) in 1970, and 0.948 (Barbados) to 0.500 (Mexico) in 1990; among non-democratic (3-5*) states, from 0.994 (Kuwait) to 0.539 (Brazil) in 1970, and 0.989 (UAE) to 0.362 (Iran) in 1990; among non-democratic (6-7) states, from 1.000 (Iran) to 0.483 (Iraq) in 1970, and 0.995 (Cuba) to 0.397 (Iraq) in 1990. Furthermore, looking specifically at the experiences of the wealthy democracies, the average level of security differed between the two dates: whereas five of the seven democracies (excepting Uruguay and Chile) had SEC values above 0.900 in 1970, only four (Barbados, South Korea, Trinidad and Tobago and Mauritius) of the eleven democracies crossed this threshold in 1990.

Within the poor sample, the non-democratic (3-5*) states posted the highest SEC average (0.840) in 1970, while the non-democratic (6-7) states showed the highest SEC average (0.749) in 1990 (democratic states produced the lowest averages for both dates, 0.748 and 0.613). A larger proportion of non-democratic (6-7) states surpassed the 0.900 SEC threshold in 1970 (56%) and in 1990 (42%); this threshold was crossed by only 14% of democratic states (1970 and 1990) and 50% of non-democratic (3-5*) states in 1970 (13% in 1990). This phenomenon simply confirms that many of the most brutal sub-Saharan African regimes remained at (relative) peace and generally exhibited low inflation rates.[5] The gaps in SEC values were considerable for all three LoD groups: 0.539 separated the top (Gambia) and bottom (India) poor democracies in 1970, compared to 0.527 (Burkina Faso/Nigeria) for non-democratic (3-5*) states and 0.987 (Togo/Indonesia) for non-democratic (6-7) states; and 0.686 separated the top (Papua New Guinea) and bottom (Peru) democracies in 1990, compared to 0.775 (Senegal/Sudan) for non-democratic (3-5*) states and 0.996 (Congo/Angola) for non-democratic (6-7) states.

[5]One is reminded of the essence of Huntington's 'poverty thesis': "...(it is) modernization (that) breeds instability...A purely traditional society would be ignorant, poor, and stable" (Huntington 1970: 319).

• *'Social Mobility' Indicators: Tertiary Enrollment, Gender Equity, %Non-Agricultural Employment, The Mobility Index*

Developing democracies typically topped all measures of social mobility. However, the gaps between the LoD groups in 1970 were not large for either sample (save for the Gender Equity index among wealthy states): there was very little to distinguish in terms of tertiary enrollment (TERT) rates, gender equity (GEND) rates (among poor states), the % of non-agricultural employment (%NAgr), and Mobility Index (MOB) rates. The differences were more pronounced for the 1990 samples, principally because several former non-democratic states with comparatively higher mobility rates had become democratic (e.g. Argentina and the Philippines).

In the wealthy sample, democratic states displayed the highest average TERT rates in 1970 and 1990 (8% and 20%). Three wealthy democracies crossed the 10% mark in 1970 (Uruguay, Venezuela and Costa Rica), along with two non-democratic (3-5*) states (Argentina and Peru); no non-democratic (6-7) state managed to do so (Cuba had the highest rate, 5.2%). Five wealthy democracies (Argentina, South Korea, Uruguay, Venezuela and Costa Rica) crossed the 25% threshold in 1990 (no non-democratic state did so).

In the sample of poor states, the three LoD groups showed similar average TERT rates in 1970 (3%, 4%, 2%). As a reflection of the generally low rates, only the Philippines (LoD 3.0) crossed the 10% mark (at 19.8%); India had the highest TERT rate for a poor democracy (6.2%). By 1990, the average TERT rate for the poor democracies (13%) was considerably greater than the averages for the non-democratic (3-5*) and non-democratic (6-7) states (6% and 4%). The only poor country to surpass the 25% mark was newly democratized Peru (33.1%). Once again, there were some very large rate fluctuations within the three LoD groups.[6]

Irrespective of date and sample group, the status of women, as captured by the GEND index (measuring both secondary female enrollment rates and females as a percentage of the labour force), was highest in developing democracies. In the wealthy sample, three democracies (Barbados, Uruguay, and Jamaica) crossed the 0.500 threshold in 1970; no non-democratic state did so (the top non-democratic (3-5*) state was Singapore at 0.468, and the top non-democratic (6-7) state was Cuba at 0.297). Moreover, four wealthy democracies (Barbados, South Korea, Uruguay and Trinidad and Tobago)

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[6]In the wealthy sample, TERT rates ranged: among democratic states, from 11.3% (Uruguay) to 2.8% (Trinidad and Tobago) in 1970, and 39.9% (Argentina) to 2.2% (Mauritius) in 1990; among non-democratic (3-5*) states, from 14.2% (Argentina) to 3.7% (Kuwait) in 1970, and 20.9% (Panama) to 3.7% (Gabon) in 1990; among non-democratic (6-7) states, from 5.2% (Cuba) to 0.4% (Gabon and Zambia) in 1970, and 20.8% (Cuba) to 15.5% (Saudi Arabia) in 1990. In the poor sample, TERT rates ranged: among democratic states, from 6.2% (India) to 0.1% (Gambia) in 1970, and 33.1% (Peru) to 0.7% (Gambia) in 1990; among non-democratic (3-5*) states, from 19.8% (the Philippines) to 0.0% (Burkina Faso) in 1970, and 15.7% (Thailand) to 1.1% (Uganda) in 1990; among non-democratic (6-7) states, from 9.2% (Syria) to 0.0% (Chad) in 1970, and 21.7% (Jordan) to 0.2% (Mozambique) in 1990.

crossed the 0.700 threshold in 1990, compared to one non-democratic (3-5*) state (Hong Kong) and one non-democratic (6-7) state (Cuba). The average GEND rates reflected these disparities: 0.489 (LoD 1-2*), 0.371 (LoD 3-5*) and 0.182 (LoD 6-7) in 1970; 0.611 (LoD 1-2*), 0.572 (LoD 3-5*) and 0.533 (LoD 6-7) in 1990.

The status of women in the poor sample was slightly more ambiguous, although democracies showed the highest average GEND rates for both dates (0.287 and 0.457). As an indication of the low level of female advancement, no state surpassed the 0.500 mark in 1970. Less than half of the poor democracies (6 of 14) managed to cross this threshold by 1990 (one non-democratic (3-5*) state and three non-democratic (6-7) states did so). Furthermore, the top two states in terms of GEND rates in 1970 were not democratic (China at 0.488, the Philippines at 0.474), although the top two states in 1990 were (with Jamaica falling into the poor sample by this date, and the Philippines returning to democratic rule). There were tremendous fluctuations in GEND rates,[7] along with purely cultural attitudes to take into account.[8]

Democracies fared only marginally better in another aspect of social mobility, the percentage of people in non-agricultural employment (%NAgr), loosely interpreted here as the degree to which people are not 'tied to the land'. In the wealthy sample, democratic and non-democratic (3-5*) states shared the same average %NAgr rate in 1970 (74%), and virtually the same rates in 1990 (83% and 79%). Likewise, in the poor sample, the three average rates were very similar in 1970 (35%, 32% and 28%), though the gaps widened by 1990 in favour of the democratic states (56%, 35% and 33%). Of course, the city-states of Singapore and Hong Kong topped the lists for both dates (96-100%), while

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[7]In the wealthy developing sample, GEND values ranged: among democratic states, from 0.726 (Barbados) to 0.307 (Costa Rica) in 1970, and 0.900 (Barbados) to 0.421 (Costa Rica) in 1990; among non-democratic (3-5*) states, from 0.468 (Singapore) to 0.228 (Mexico) in 1970, and 0.724 (Hong Kong) to 0.356 (Gabon) in 1990; among non-democratic (6-7) states, from 0.297 (Cuba) to 0.062 (Saudi Arabia) in 1970, and 0.854 (Cuba) to 0.331 (Saudi Arabia) in 1990. In the poor sample, GEND values ranged: among democratic states, from 0.472 (Sri Lanka) to 0.110 (Bangladesh) in 1970, and 0.713 (Jamaica) to 0.261 (Papua New Guinea) in 1990; among non-democratic (3-5*) states, from 0.474 (the Philippines) to 0.052 (Afghanistan) in 1970, and 0.507 (Zimbabwe) to 0.121 (Bangladesh) in 1990; among non-democratic (6-7) states, from 0.488 (China) to 0.080 (Algeria) in 1970, and 0.552 (Egypt) to 0.091 (Afghanistan) in 1990.

[8]One could argue that some of the more 'traditionally-minded' societies are, to some extent, predisposed against the principles represented by the GEND variable, and are thus more likely to display lower GEND values. This appears to be true for the Islamic societies which comprise the MID region. The MID region had a much lower GEND average (0.176) than the other regions in 1970 (0.309 for ASI, 0.337 for LAT and 0.251 for AFR). Furthermore, only one of the 13 MID states (Kuwait) had a GEND value (0.441) higher than the average found for all developing states (0.273), and five states (Morocco, Saudi Arabia, Algeria, the UAE, Libya) had GEND values which were less than 0.137 (or *half* the developing average). A noticeable improvement had occurred by 1990. Though still falling behind the averages for the ASI (0.453) and LAT (0.531) regions, the MID region did at least display a higher average (0.437) than the AFR region (0.328). Of greater significance, however, is that six MID states (Iran, UAE, Algeria, Egypt, Jordan, Kuwait) managed to surpass the developing average (0.420). But given their relatively high levels of development, most MID states should have displayed far better GEND rates.

sub-Saharan African states clustered at the bottom (only 11% of AFR states surpassed the 50% mark in 1970, and only 17% did so in 1990).[9]

On the whole, developing democracies best captured the dimensions represented by all three variables - TERT, GEND and %NAgr - as reflected in their higher average Mobility Index (MOB) rates for both dates and samples. The differences in MOB averages were not, however, particularly pronounced: 0.044 (1970) and 0.060 (1990) in the wealthy sample; 0.021 (1970) and 0.152 (1990) in the poor sample. Only three wealthy states - two democracies, Uruguay and Barbados, and one non-democratic (3-5*) state, Singapore - surpassed the 0.500 mark in 1970, compared to ten states - seven democracies, one non-democratic (3-5*) state (Hong Kong) and two non-democratic (6-7) states (Cuba and Kuwait) - which did so in 1990. Whereas none of the states in the poor sample crossed the 0.500 threshold in 1970, five had succeeded in doing so by 1990: four democracies (Peru, Colombia, the Philippines, Jamaica) and one non-democratic (6-7) state (Jordan).

Comparing Indicator Averages: Controlling For Regional Variations

As well as having to account for the level of economic development (since, irrespective of the level of democracy, wealthier states are likely to display higher indicator rates than their poorer counterparts) there is also a 'regional divide' to be addressed. Because Latin America contained a larger proportion of democracies than the other developing regions (Chapter 4) - 8 of the 14 developing democracies in 1970 (including all 7 democratic states in the wealthy sample), and 16 of the 25 democracies in 1990 (including 8 of the 11 wealthy democracies) - one may question the wisdom of deriving any conclusions concerning the general relationship between democracy and higher indicator levels in the developing world. Moreover, as will become apparent shortly, democratic states in the other regions did not fare particularly well.

The average indicator rates produced by the three levels of democracy in each region are presented in Table 6.4. Quite clearly, there is not the same consistency as the earlier results. Excluding both the civil liberties measure and the Liberty Index (where, predictably, they scored highly), democratic states produced the highest indicator averages in only 10 of the 40 remaining regional cases in 1970: literacy (LAT); life

[9]Specifically, only four of the 36 AFR states crossed the 50% mark in 1970 - South Africa (69%), Mauritius (66%), Congo (58%) and Benin (50%) - and only five managed to surpass the mark in 1990 - South Africa (87%), Mauritius (84%), Lesotho (77%), Botswana (72%) and Zambia (62%). The regional average (AFR) was very low for both 1970 (23%) and 1990 (31%), especially when compared against the %NAgr averages for all developing states (40% and 51%).

Table 6.4 Average Indicator Rates By Level of Democracy (1970 and 1990), Controlling For Regional Variations

Indicator	Region	1970 Level of Democracy 1-2*	3-5*	6-7	1990 Level of Democracy 1-2*	3-5*	6-7
Literacy (%)	ASI	49	54	57	78	65	69
	LAT	89	68	59	88	79	75
	MID	52	54	30	82	62	67
	AFR	6	32	24	64	56	47
Life Expect. (years)	ASI	55	55	51	64	65	69
	LAT	65	57	56	69	68	66
	MID	58	67	54	67	67	67
	AFR	35	45	42	58	53	49
ChildSurv. (%)	ASI	86	86	85	93	91	87
	LAT	93	86	85	94	94	93
	MID	82	94	83	91	92	93
	AFR	68	78	76	88	84	81
Civil Lib (1.0-7.0)*	ASI	3.3	4.4	5.4	3.2	3.7	6.3
	LAT	2.1	3.9	4.8	2.5	3.7	5.7
	MID	4.0	4.0	5.8	3.7	4.8	5.6
	AFR	2.0	4.1	6.0	2.2	4.8	5.9
LIB Index (1.0-0.0)**	ASI	0.668	0.576	0.479	0.743	0.686	0.428
	LAT	0.873	0.620	0.540	0.811	0.711	0.535
	MID	0.567	0.691	0.428	0.685	0.603	0.543
	AFR	0.595	0.525	0.340	0.781	0.525	0.400
CONF (1.0-0.0)**	ASI	0.355	0.764	0.507	0.594	0.809	0.570
	LAT	0.925	0.846	0.932	0.888	0.761	1.000
	MID	0.720	1.000	0.706	0.651	0.604	0.693
	AFR	1.000	0.812	0.772	1.000	0.636	0.848
Inflation (%)	ASI	3	7	15	9	6	15
	LAT	14	9	3	101	130	4
	MID	6	1	6	45	8	5
	AFR	3	3	5	13	24	47
SEC Index (1.0-0.0)**	ASI	0.646	0.817	0.629	0.708	0.847	0.639
	LAT	0.823	0.837	0.932	0.640	0.653	0.962
	MID	0.804	0.994	0.793	0.379	0.722	0.788
	AFR	0.968	0.873	0.838	0.868	0.641	0.738
Tert Enrol. (Rates %)	ASI	3	6	2	15	8	4
	LAT	7	7	4	19	14	11
	MID	6	4	4	13	10	15
	AFR	0.1	1	2	2	4	2
Gend Equity (1.0-0.0)**	ASI	0.304	0.297	0.328	0.558	0.433	0.358
	LAT	0.464	0.275	0.256	0.543	0.458	0.612
	MID	0.244	0.441	0.146	0.283	0.429	0.459
	AFR	0.262	0.265	0.245	0.449	0.379	0.293

(cont'd)

(Table 6.4 cont'd)

Indicator	Region	1970 Level of Democracy 1-2*	3-5*	6-7	1990 Level of Democracy 1-2*	3-5*	6-7
NonAgr (%)	ASI	32	52	23	50	58	35
	LAT	73	51	44	77	62	54
	MID	33	98	55	53	75	77
	AFR	18	29	22	57	33	26
MOB Index (1.0-0.0)**	ASI	0.221	0.300	0.193	0.421	0.374	0.255
	LAT	0.430	0.294	0.247	0.523	0.419	0.433
	MID	0.218	0.490	0.247	0.328	0.439	0.478
	AFR	0.148	0.186	0.157	0.350	0.255	0.192

Notes: *Civil Liberties range from 1.0 (most rights) to 7.0 (fewest/no) rights
**Scale ranges from 1.000 (highest) to 0.000 (lowest)

expectancy (LAT); child survival (LAT); peace/stability (AFR); inflation (ASI); the Security Index (AFR); tertiary enrollment (MID); gender equity (LAT); %non-agricultural employment (LAT); the Mobility Index (LAT). There were five other cases where democratic states shared the highest average with one of the two non-democratic groups: life expectancy (ASI); child survival (ASI); inflation (MID and AFR); tertiary enrollment (LAT). The non-democratic (3-5*) group of states produced the highest averages most often (19 cases).

The picture had changed by 1990. Again omitting the civil liberties measure and the Liberty Index, democratic states exhibited the highest averages in exactly half (20) of the regional cases: literacy (all four regions); life expectancy (LAT and AFR); child survival (ASI and AFR); peace/stability (AFR); inflation (AFR); the Security Index (AFR); tertiary enrollment (ASI and LAT); gender equity (ASI and AFR); % non-agricultural employment (LAT and AFR); and the Mobility Index (ASI, LAT and AFR). There were two cases where democratic states shared the highest average: life expectancy (MID) and child survival (LAT). The non-democratic (3-5*) and non-democratic (6-7) states produced the highest averages in 5 and 13 cases, respectively.

These results varied by indicator. In 1970, for example, the non-democratic (6-7) states had the highest average literacy rate in the ASI region (57%), the democratic states had the highest average literacy rate in the LAT region (89%), and the non-democratic (3-5*) states had the highest rates in the MID (54%) and AFR (32%) regions. By 1990, however, the democratic states displayed the highest literacy averages in all four regions.

Looking at the other measure of individual capabilities, life expectancy, one finds similar patterns: in 1970, the democratic and non-democratic (3-5*) states shared the same average rate (55 years) in the ASI region, the democratic states had the highest rate

(65 years) in the LAT region, and the non-democratic (3-5*) states showed the highest rates in the MID (67 years) and AFR (45 years) regions; in 1990, the non-democratic (6-7) states had the highest average life expectancy rate (69 years) in the ASI region, the democratic states had the highest average rates in the LAT (69 years) and AFR (58 years) regions, and all three LoD groups shared the same average (67 years) in the MID region.

Turning next to the liberty indicators, in only one region (LAT) did the democratic states produce the highest average child survival rate (93%) in 1970. Democratic and non-democratic (3-5*) states shared an identical average rate (86%) in the ASI region; the non-democratic (6-7) states were one percentage point behind (85%). In both the MID and AFR regions, the non-democratic (3-5*) states displayed the highest averages (67% and 45%, respectively). In 1990, the democratic states had the highest average child survival rates in the ASI and AFR regions (93% and 88%), and shared the same average rate as the non-democratic (3-5*) states in the LAT region (94%); in the MID region, the democratic representative (Turkey) fell two points shy of the non-democratic (6-7) states (93%).

Since the democratic states in each region produced by far the highest average civil liberties scores, whatever shortfalls may have existed in the average child survival rates were largely concealed by the averages for the Liberty Index: with the exception of the MID region in 1970, the democratic states produced the highest average LIB values across the regions and for both dates.

Democratic states did not fare well against the three security indicators. In both 1970 and 1990, they had the highest peace/stability (CONF) average in only the AFR region (1.000). The non-democratic (3-5*) states had the highest rates in the ASI (0.764) and MID (1.000) regions in 1970, whereas the non-democratic (6-7) states had the highest average (0.932) in the LAT region. In 1990, the non-democratic (3-5*) states showed the highest CONF average (0.809) in the ASI region, and the non-democratic (6-7) states had the highest averages in the LAT (1.000) and MID (0.693) regions.

The situation regarding inflation rates was slightly better for 1970 than 1990. Although democratic states had the best inflation average (3%) in only one region in 1970 (ASI), they equaled the average rates produced by the non-democratic (6-7) states in the MID region (6%) and by the non-democratic (3-5*) states in the AFR region (3%); in the LAT region, the non-democratic (6-7) states had the best average inflation rate (3%). The democratic states also displayed the best average (13%) in only one region (AFR) in 1990. The non-democratic (3-5*) states showed the best rate (6%) in the ASI region, while the non-democratic (6-7) states had the best rates in the LAT (4%) and MID (5%) regions.

Translating these results into the Security Index, one finds that the democratic states had the highest average SEC rates (0.968 and 0.868) in only the AFR region in 1970 and 1990. The non-democratic (3-5*) states had the highest SEC rates in the ASI

(0.817) and MID (0.994) regions in 1970, and the non-democratic (6-7) states had the highest average (0.932) in the LAT region. Likewise, the non-democratic (3-5*) states exhibited the highest SEC average (0.847) in the ASI region in 1990, whereas the non-democratic (6-7) states had the highest averages in the LAT (0.962) and MID (0.788) regions.

The record of developing democracies in terms of social mobility was mixed. Regarding tertiary enrollment, democratic states produced the highest average rate (6%) in only one region (MID) in 1970, but shared the same rate (7%) as the non-democratic (3-5*) states in the LAT region. The non-democratic (3-5*) states had the highest rate (6%) in the ASI region, and the non-democratic (6-7) states had the highest rate (2%) in the AFR region. On the other hand, democratic states produced the highest average rates in the ASI (15%) and LAT (19%) regions in 1990, the non-democratic (6-7) states had the highest rate (15%) in the MID region, and the non-democratic (3-5*) states had the highest rate (4%) in the AFR region.

Democratic states produced the highest average gender equity (GEND) rate (0.464) in only one region (LAT) in 1970, while the non-democratic (6-7) states had the highest average rate (0.328) in the ASI region, and the non-democratic (3-5*) states had the highest GEND rates in the MID (0.441) and AFR (0.265) regions. Democratic states showed the highest gender equity rates in two regions in 1990, ASI (0.558) and AFR (0.449), while the non-democratic (6-7) states had the highest rates in the two other regions, LAT (0.612) and MID (0.459).

Virtually the same patterns were observed for non-agricultural employment rates. Democratic states displayed the highest rate (73%) in only one region (LAT) in 1970, whereas the non-democratic (3-5*) states had the highest average rates in the three other regions (52% for ASI, 98% for MID, and 29% for AFR). In 1990, democratic states produced the highest rates in two regions, LAT (77%) and AFR (57%), the non-democratic (3-5*) states showed the highest average (58%) in the ASI region, and the non-democratic (6-7) states had the highest average (77%) in the MID region.

The democratic record for the overall Mobility Index was better for 1990 than 1970. Democratic states produced the highest MOB average (0.430) in only the LAT region in 1970, whereas the non-democratic (3-5*) states had the highest rates in the ASI (0.300), MID (0.490) and AFR (0.186) regions. In 1990, however, democratic states had the highest MOB rates in three regions - ASI (0.421), LAT (0.523) and AFR (0.350) - while the non-democratic (6-7) states had the highest average (0.478) in the MID region.

To summarize, democratic states displayed the highest averages in: five of the eight regional cases involving literacy rates; three of the eight cases involving life expectancy rates (and tied for two cases); three of the eight cases involving child survival rates (and tied for two cases); all eight cases involving civil liberties rates; seven of the

eight cases involving LIB rates; two of the eight cases involving peace/stability (CONF) rates; two of the eight cases involving inflation rates (and tied for two cases); three of the eight cases involving tertiary enrollment rates (and tied for one case); three of the eight cases involving non-agricultural employment rates; and four of the eight cases involving Mobility Index rates. Thus, for only four of the twelve indicators (literacy, civil liberties, the Liberty Index, and the Mobility Index) did democratic states produce the highest averages in the majority of regional cases.

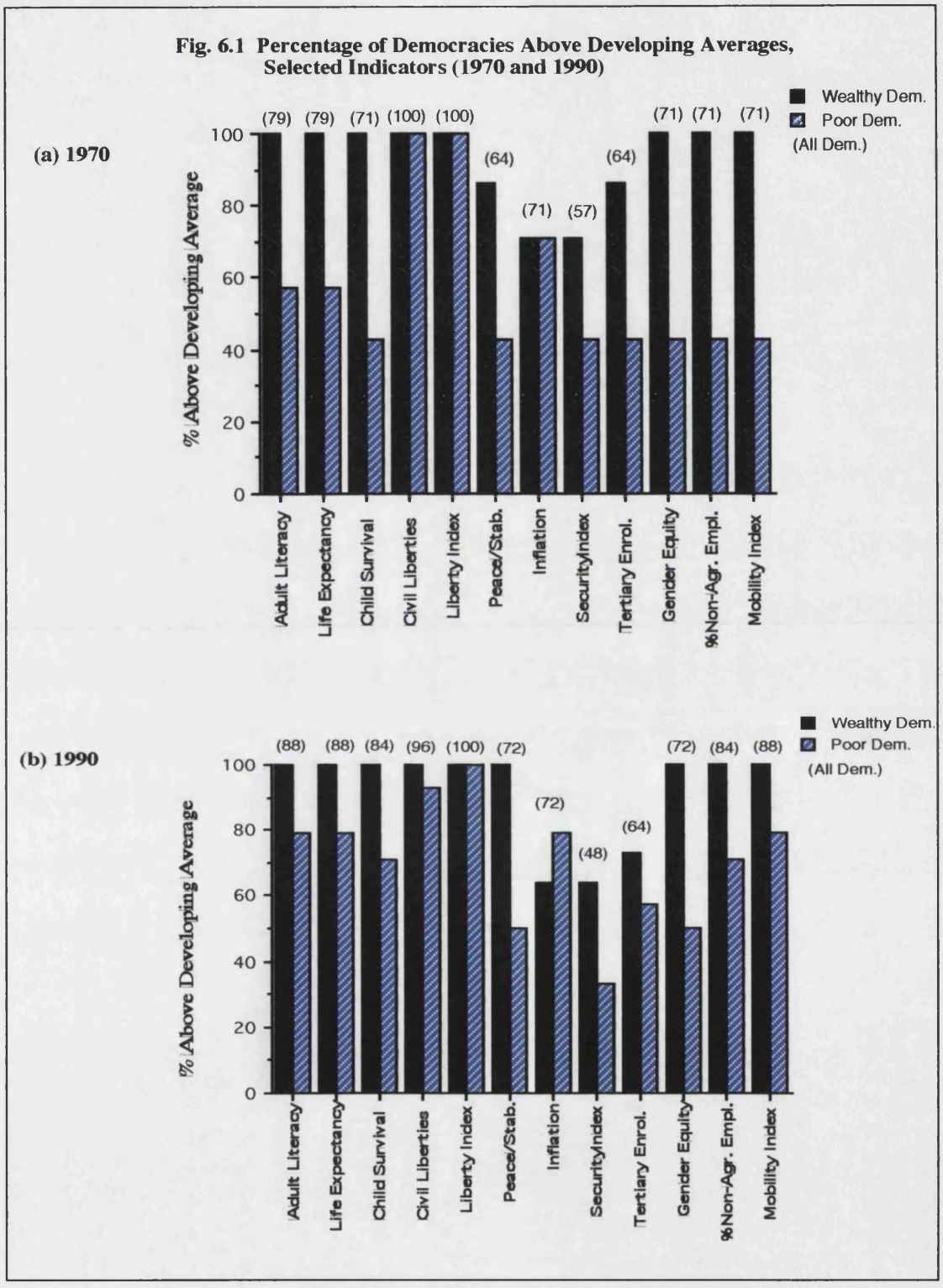
The findings may also be interpreted by region. In the ASI region, democracies displayed the best averages in ten of the twenty-four comparative cases (the twelve indicators multiplied by the two dates): literacy (1990); child survival (1990, and tied in 1970); civil liberties (both dates); the Liberty Index (both dates); inflation (1970); tertiary enrollment (1990); gender equity (1990); and the Mobility Index (1990). In the LAT region, democracies displayed the best averages in fifteen cases: literacy (both dates); life expectancy (both dates); child survival (1970, and tied in 1990); civil liberties (both dates); the Liberty Index (both dates); tertiary enrollment (1990, and tied in 1970); gender equity (1970); non-agricultural employment (both dates); and the Mobility Index (both dates). In the MID region, Turkey displayed the best record in only five cases: literacy (1990); civil liberties (both dates); the Liberty Index (1990); and tertiary enrollment (1970). In the AFR region, democracies - only Gambia in 1970, joined by Mauritius and Botswana in 1990 - displayed the best averages in fifteen cases: literacy (1990); life expectancy (1990); child survival (1990); civil liberties (both dates); the Liberty Index (both dates); peace/stability (both dates); inflation (1990, and tied in 1970); the Security Index (both dates); gender equity (1990); non-agricultural employment (1990); and the Mobility Index (1990). In effect, democratic states compared favourably in only the LAT and AFR regions, although even here the findings are not entirely conclusive.

A Closer Look at the Developing Democracies

Whereas the preceding accounts provided different contexts in which to compare the three LoD groups, controlling for economic development and regional variations, this section will evaluate the records of the democratic states against the standards of the developing world in general. After initially demonstrating how democracies fared against the developing averages for the indicators, attention will turn to a more specific account of the record of each democratic state.

Figure 6.1 depicts the percentage of democracies surpassing the developing average (N=88) for each indicator. The results are presented for two dates, 1970 and 1990, and the records of the wealthy and poor democracies are portrayed side by side (the percentage of all democratic states - wealthy and poor - above the developing average is given in parenthesis).

Fig. 6.1 Percentage of Democracies Above Developing Averages, Selected Indicators (1970 and 1990)



Two facts become immediately apparent. First, a large majority of all democracies displayed rates above the developing averages for both dates. This was to be expected given that, as confirmed earlier, a very high percentage of democracies (between 72-86%) surpassed the average HDI, ISC and I-HDI values for all developing states (Table 4.4 in

Chapter 4). As the correlations had suggested (Table 6.1), the highest percentages were found for the civil liberties measure and the Liberty Index (96-100%), while the lowest percentages were found for the three security indicators (48-72%); the other percentages, in decreasing order, were: 79-88% for literacy and life expectancy; 71-88% for the Mobility Index; 71-84% for child survival and the % of non-agricultural employment; 71-72% for gender equity; and 64% for tertiary enrollment.

The second point worth noting is that a far higher percentage of wealthy democracies surpassed the developing averages for virtually every indicator (save for civil liberties and the Liberty Index, where the two samples had almost identical records, and inflation, where the two samples had identical records in 1970, although the poor democracies had a better record in 1990). Indeed, the impact of economic development was considerable (as was noted in Table 6.3 above). For instance, in both 1970 and 1990, all wealthy democracies (100%) surpassed the developing averages for literacy, life expectancy, child survival, civil liberties, the Liberty Index, gender equity, the % of non-agricultural employment and the Mobility Index; the corresponding percentages for the poor democracies were: 57%-79% (literacy and life expectancy); 43-71% (child survival); 93-100% (civil liberties and the Liberty Index); 43-50% (gender equity); 43-71% (% of non-agricultural employment); and 43-79% (the Mobility Index). Significant discrepancies were also found for the other indicators: 86-100% of wealthy democracies had above average peace/stability values, compared to 43-50% of poor democracies; 64-71% of wealthy democracies had above average Security Index values, compared to 33-43% of poor democracies; and 73-86% of wealthy democracies had above average tertiary enrollment rates, compared to 43-57% of poor democracies. The percentage of states from both samples with above average inflation rates was broadly similar: 64-71% (wealthy democracies) and 71-79% (poor democracies).

Table 6.5 breaks down these general findings by individual democracy. Looking down the columns, one may trace the record of each state against the developing average for a particular indicator, while, looking across the rows, one may assess a state's overall record against all indicators. A positive (+) sign indicates that a democracy surpassed the developing average, a negative sign (-) indicates that it did not. There were fourteen states with (largely) democratic LoD values (1.0-2.9) in 1970, divided evenly (seven apiece) into the wealthy (INC 1&2) and poor (INC 3&4) samples. This number increased to 25 in 1990, eleven in the wealthy sample and fourteen in the poor sample.

The seven Latin American states which comprised the wealthy sample in 1970 exhibited very impressive results. Four states in particular (Barbados, Costa Rica, Jamaica and Venezuela) surpassed the developing average for all twelve indicators (Trinidad and Tobago failed to surpass only the tertiary enrollment average). Two states stumbled against the security indicators, Uruguay (inflation and the Security Index) and Chile (all three security indicators).

Table 6.5 How Individual Democracies Fared Against Developing Averages For Selected Indicators, 1970 and 1990

Year	Sample	Democracy	IND CAP		LIBERTY			SECURITY			MOBILITY			
			Lit	LEx	Surv	CL	LIB	Conf	Infl	SEC	Tert	Gend	NAg	MOB
1970	Wealthy	Barbados	+	+	+	+	+	+	+	+	+	+	+	+
		Chile	+	+	+	+	+	-	-	-	+	+	+	+
		Costa R.	+	+	+	+	+	+	+	+	+	+	+	+
		Jamaica	+	+	+	+	+	+	+	+	+	+	+	+
		Trin.&Tob.	+	+	+	+	+	+	+	+	-	+	+	+
		Uruguay	+	+	+	+	+	+	-	-	+	+	+	+
		Venezu.	+	+	+	+	+	+	+	+	+	+	+	+
	Poor	Banglad.	-	-	-	+	+	-	+	-	-	-	-	-
		Colombia	+	+	+	+	+	+	-	+	+	+	+	+
		Gambia	-	-	-	+	+	+	+	+	-	-	-	-
		India	-	-	-	+	+	-	-	-	+	-	-	-
		Malaysia	+	+	+	+	+	+	+	+	-	+	+	+
		Sri Lanka	+	+	+	+	+	-	+	-	-	+	+	+
		Turkey	+	+	-	+	+	-	+	-	+	-	-	-
1990	Wealthy	Argentina	+	+	+	+	+	+	-	-	+	+	+	+
		Barbados	+	+	+	+	+	+	+	+	+	+	+	+
		Botswana	+	+	+	+	+	+	+	+	-	+	+	+
		Brazil	+	+	+	+	+	+	-	-	+	+	+	+
		Costa R.	+	+	+	+	+	+	+	+	+	+	+	+
		Mauritius	+	+	+	+	+	+	+	+	-	+	+	+
		Mexico	+	+	+	+	+	+	-	-	+	+	+	+
		South Kor	+	+	+	+	+	+	+	+	+	+	+	+
		Trin.&Tob.	+	+	+	+	+	+	+	+	-	+	+	+
		Uruguay	+	+	+	+	+	+	-	-	+	+	+	+
		Venezu.	+	+	+	+	+	+	+	+	+	+	+	+
	Poor	Bolivia	+	+	-	+	+	+	-	-	+	-	+	+
		Colombia	+	+	+	+	+	-	+	-	+	+	+	+
		Domin. R	+	+	+	+	+	+	+	+	+	+	+	+
		Ecuador	+	+	+	+	+	+	+	-	+	+	+	+
		El Salvad.	+	+	+	+	+	-	+	-	+	-	+	+
		Gambia	-	-	-	+	+	+	+	+	-	-	-	-
		Honduras	+	+	+	+	+	+	+	+	-	-	+	+
		India	-	-	-	+	+	-	+	-	-	-	-	-
		Jamaica	+	+	+	+	+	+	+	+	-	+	+	+
		PapuaNG	-	-	+	+	+	+	+	+	-	-	-	-
		Peru	+	+	-	+	+	-	-	-	+	+	+	+
		Philippin.	+	+	+	+	+	-	+	-	+	+	+	+
		Sri Lanka	+	+	+	-	+	-	+	-	-	+	-	+
		Turkey	+	+	+	+	+	-	-	-	+	-	+	-

Notes: 1. (+) means above developing average, (-) means below developing average. 2. The developing averages (1970 and 1990) were: 44% and 66% for Literacy (Lit); 51 years and 60 years for life expectancy (LEx); 82.2% and 88.2% for child survival (Surv); 4.7 and 4.5 for civil liberties (CL); 0.512 and 0.590 for the Liberty Index (LIB); 0.769 and 0.780 for the peace/stability index (Conf); 6.6% and 44.4% for inflation (Infl); 0.820 and 0.717 for the Security Index (SEC); 3.3% and 9.1% for tertiary enrollment (Tert); 0.273 and 0.420 for the gender equity index (Gend); 40% and 51% for the % of non-agricultural employment (NAg); 0.238 and 0.352 for the Mobility Index (MOB).

Six new states had joined the sample of wealthy democracies by 1990 - Argentina, Brazil, Botswana, Mauritius, Mexico (barely) and South Korea (barely) - while Jamaica had fallen into the poor sample and Chile had fallen out of the democratic LoD range altogether. Four of the eleven states surpassed the developing averages for all twelve indicators: Barbados, Costa Rica, South Korea and Venezuela. Three states (Botswana, Mauritius, Trinidad and Tobago) failed to surpass the average for only one indicator, tertiary enrollment, while the four remaining states (Argentina, Brazil, Mexico and Uruguay) failed against the same two indicators, inflation and the Security Index.

There was considerable variation in the poor sample. Only three of the seven poor democracies had relatively good records in 1970: Colombia and Malaysia failed to surpass the developing average for only indicator (inflation and tertiary enrollment, respectively), while Sri Lanka failed to surpass three indicator averages (peace/stability, the Security Index and tertiary enrollment). Turkey produced a mixed record, surpassing the developing averages for exactly six of the twelve indicators. The only African representative, Gambia, displayed above average rates in just five cases: civil liberties and the Liberty Index (predictably); and all three security indicators. India and Bangladesh exhibited dismal records, managing to exceed the developing averages for only three indicators: civil liberties and the Liberty Index (predictably); inflation (Bangladesh) and tertiary enrollment (India).

The picture was noticeably better for the poor sample in 1990, primarily because of the inclusion of some recently democratized states. Six of the fourteen poor democracies displayed good records against the developing averages: the Dominican Republic exceeded all 12 indicator averages; Ecuador and Jamaica exceeded 11 averages; Colombia, Honduras and the Philippines exceeded 10 averages. At the other extreme, India and Gambia once again had poor records, surpassing the developing averages for three and five indicators, respectively.

The wealthy democracies therefore did well, the poor democracies less so, confirming the need to take levels of economic development into account before generalizations can be made. Moreover, the influence of the Latin American democracies, so prevalent in the wealthy sample, suggests that regional variations must also be acknowledged and evaluated.

6.2 Democracy and Selected Indicator Performance Rates

The second part of the democracy-development relationship is concerned with performance, or rates of change. The results presented in Chapter 5 demonstrate that the level of democracy tells us very little about a state's ability to improve HDI, ISC and I-HDI rates; although, arguably, democratic states have not performed as well, on average, as non-democratic states over the 1970-90 period when controlling variables were introduced. The following sections will explore these themes further by analyzing the performance rates for the individual indicators behind the composite measures. Performance rates will hereinafter denote changes (increases/decreases) in indicator levels between the start (1970) and end (1990) of the period.[10]

General Patterns

Given the extremely weak correlations found between LoD values and HDI, ISC and I-HDI performance rates for the developing samples during the 1970-90 period, showing that only around 1% of the rate variations could be explained by the level of democracy (Table 5.1), one would expect to find very weak correlations for each individual indicator as well. This is largely the case, as Table 6.6 confirms.

Table 6.6 Correlations Between Indicator Performance Rates and Levels of Democracy, 1970-90

Indicator			Indicator		
Literacy	r=	0.421	Inflation	r=	-0.092
	r^2=	0.178		r^2=	0.009
Life Exp.	r=	0.029	SEC Index	r=	0.140
	r^2=	0.001		r^2=	0.019
Child Surv	r=	0.204	Tert Enrol	r=	-0.304
(SURV)	r^2=	0.042		r^2=	0.093
Civil Lib	r=	0.883	Gend Equity	r=	-0.192
	r^2=	0.779	(GEND)	r^2=	0.037
LIB Index	r=	0.010	%NAgr	r=	-0.264
	r^2=	0.000		r^2=	0.070
Peace/Stab	r=	0.043	MOB Index	r=	-0.328
(CONF)	r^2=	0.002		r^2=	0.107

[10]There are two exceptions. Instead of showing how civil liberties changed between 1970 and 1990, the *average* civil liberties value is given for 1970-90, thereby indicating the level of civil liberties enjoyed *throughout* the period. The same approach was taken for inflation: the performance rates indicate the average level of inflation experienced throughout the 1970-90 period.

The only strong correlation is (unsurprisingly) between democracy and civil liberties. The level of democracy apparently had some minor influence on changes in literacy rates over the period: the moderate positive correlation shows that higher (i.e. less democratic) LoD values were associated with larger increases in literacy rates (as will be demonstrated shortly, this can be explained by the fact that most developing democracies were relatively literate to begin with, and were thus likely to produce more incremental increases). The correlations for the other indicators were either fairly weak (child survival, tertiary enrollment, % non-agricultural employment, and the Mobility Index) or extremely weak (life expectancy, peace/conflict, inflation, gender equity, the Liberty Index, and the Security Index). Judging by the r-squared values (save for civil liberties and inflation, which are based on period averages), the level of democracy may at most explain, in decreasing order: around 18% of the variation in literacy rates; 11% of the variation in Mobility Index rates; 9% of the variation in tertiary enrollment rates; 7% of the variation in %non-agricultural employment rates; 4% of the variation in child survival and gender equity rates; and between 0-2% of the variation in life expectancy rates, peace/stability rates, Liberty Index rates, and Security Index rates. There is clearly no general relationship between the level of democracy and changes in indicator levels.

As the weak correlations suggest, there were tremendous variations in indicator performance rates over the period (Table 6.7 below). Irrespective of the level of economic development to begin with, high and low increases were observed for states within each level of democracy. Moreover, these increases were fairly similar across all three LoD groups. Consider the increases in literacy rates in the sample of poor developing states: from 33% (Papua New Guinea) to 9% (Colombia) among the democratic states; from 34% (Botswana) to 7% (Philippines) among the non-democratic (3-5*) states; and from 44% (Malawi) to 9% (Benin) among the non-democratic (6-7) states.

Rate variations must be evaluated against the indicator levels at the beginning of the period. In the above examples, Papua New Guinea's increase must be viewed in the context of its very low rate (32%) in 1970, whereas Colombia was considerably more literate (78%). Botswana also began the period from a comparatively lower level of literacy (41%) than the Philippines (83%). Only in the case of the two non-democratic (6-7) states can a proper comparison be made: both Malawi and Benin had dismally low rates in 1970 (10% and 16%), proving that the former's record was much more impressive (although Malawi still had a low literacy rate in 1990, 54%). Furthermore, in the wealthy sample, when contrasted with the enormous increases in literacy rates for the UAE (57%) and Saudi Arabia (55%), the lower rate increase for (somewhat) democratic Peru (15%) appears to be quite modest. But taking into account Peru's much higher literacy rate (71%) in 1970, both the UAE (21%) and Saudi Arabia (9%) had considerably more room to improve (especially given their national wealth).

Table 6.7 Variations In Indicator Performance Rates By Level of Democracy, Controlling for Economic Development (1970-90)

Indicator	Increase	WEALTHY (INC 1&2) Level of Democracy 1-2*	3-5*	6-7	POOR (INC 3&4) Level of Democracy 1-2*	3-5*	6-7
Literacy (%)	Highest	15 (Peru)	57 (UAE)	55 (Saudi)	33 (PapNG)	34 (Botsw)	44 (Malaw)
	Lowest	1 (Barba)	3 (Argen)	5 (Chile)	9 (Colom)	7 (Philip)	9 (Benin)
Life Expect. (years)	Highest	12 (Peru)	11 (Iran)	15 (Saudi)	14 (Hond)	16 (Indon)	15 (Tunis)
	Lowest	6 (Barbad)	1 (Zamb)	5 (Cuba)	6 (SriLa)	-3 (Ugand)	3 (Rwand)
ChildSurv. (%)	Highest	5 (Peru)	13 (Iran)	9 (Saudi)	9 (Turkey)	11 (Mada.)	14 (Egypt)
	Lowest	2 (Trinid)	2 (HongK)	4 (Kuwait)	3 (Malay)	3 (Ugand)	0 (Mozam)
LIB Index (1.0-0.0)**	Highest	0.191(Trini)	0.239(Braz)	0.176(Guin)	0.118(Turk)	0.290(SKor)	0.311(Egy)
	Lowest	-0.034(Ven)	0.001(Mexi)	-0.069(Kuw)	-0.098(SrL)	-0.019(Ban)	-0.112(Ken)
CONF (1.0-0.0)**	Highest	0.000(5diff)	0.206(Arg)	0.600(Chile)	0.272(Hond)	1.000(Nige.)	1.000(2dif)
	Lowest	-0.476(Peru)	-1.000(Iran)	-0.486(Kuw)	-0.728(ElSa)	-0.520(Lib.)	-1.000(Afg)
SEC Index (1.0-0.0)**	Highest	0.013(Barb)	0.328(UAE)	0.425(Chile)	0.121(India)	0.807(Indo)	0.511(Jor)
	Lowest	-0.634(Peru)	-0.638(Iran)	-0.237(Kuw)	-0.533(ElSa)	-0.556(Nic)	-0.662(Soma)
Tert Enrol. (Rates %)	Highest	22.1 (Peru)	25.7 (Arge)	17.1 (Cuba)	12.3 (DomR)	29.8 (SKor)	19.5 (Jord)
	Lowest	0.4 (Jam)	1.2 (Sing)	0.8 (Guin)	-0.7 (Maur)	0.3 (Pak)	-0.1 (Moza)
GEND (1.0-0.0)**	Highest	0.271(Trin)	0.443(UAE)	0.556(Cuba)	0.300(DomR)	0.376(SKo)	0.352(Egy)
	Lowest	0.082(Ven)	0.053(Zamb)	-0.016(Guin)	0.040(Tur)	0.011(Ban)	-0.009(Moz)
NonAgr (%)	Highest	17 (CRica)	35 (Zamb)	28 (Iraq)	45 (ElSal)	59 (Botsw)	67 (Lesot)
	Lowest	4 (Jam)	3 (Hong)	1 (Kuw)	-2 (Gamb)	-7 (Zimb)	-20 (Benin)
MOB Index (1.0-0.0)**	Highest	0.224(Peru)	0.243(UAE)	0.291(Cuba)	0.222(ElSa)	0.290(Bot)	0.284(Leso)
	Lowest	0.070(Jam)	0.069(Gab)	0.021(Guin)	0.012(Gam)	0.013(Ugan)	-0.050(Ben)

Notes:
1. **Scale ranges from 1.000 (highest) to 0.000 (lowest)
2. dif=different states
3. The civil liberties and inflation measures have been omitted from this table given that they represent averages over the entire period, not changes between two points in time (recall footnote 10).

Comparing Average Indicator Performance Rates: Controlling For Economic Development

Just how the three levels of democracy compared in terms of average performance rates over the period will now be examined for each set of indicators in turn. In order to control for similar levels of economic development in 1970, developing states have first been separated into 'wealthy' (INC 1&2) and 'poor' (INC 3&4) samples, and then by LoD group.[11] To provide further context for the performance rate increases, the series of illustrations to follow also depict the average starting ('take-off') levels for each LoD group.

On the whole, the records of democracies with respect to improvements in the levels of individual capabilities must be judged to be satisfactory (Figure 6.2 overleaf). Beginning the period at a considerably higher average literacy level (graph a), the wealthy democracies were bound to produce the lowest average increase in literacy rates (7%). In fact, the best average increase that the wealthy democracies could have possibly achieved would have been only 13% (thereby taking the 1990 figure to 100% since the average literacy level in 1970 was already 87%); but even this maximum increase would have still been less than the increases for the non-democratic (3-5*) and non-democratic (6-7) states (21% and 23%), which were starting from much lower average literacy levels (61% and 46%). In the poor sample, democracies also began the period from the highest average literacy level (53%, compared to 44% for non-democratic (3-5*) states and only 26% for non-democratic (6-7) states). Hence, despite producing a lower average increase (20%) than the non-democratic (6-7) states (27%), the poor democracies still ended the period at a higher level (73%, compared to 53% for the non-democratic (6-7) states); the non-democratic (3-5*) states showed an increase of 18% (to 62% in 1990).

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[11]The exact breakdown of developing states (N=88) over the 1970-90 period is as follows:

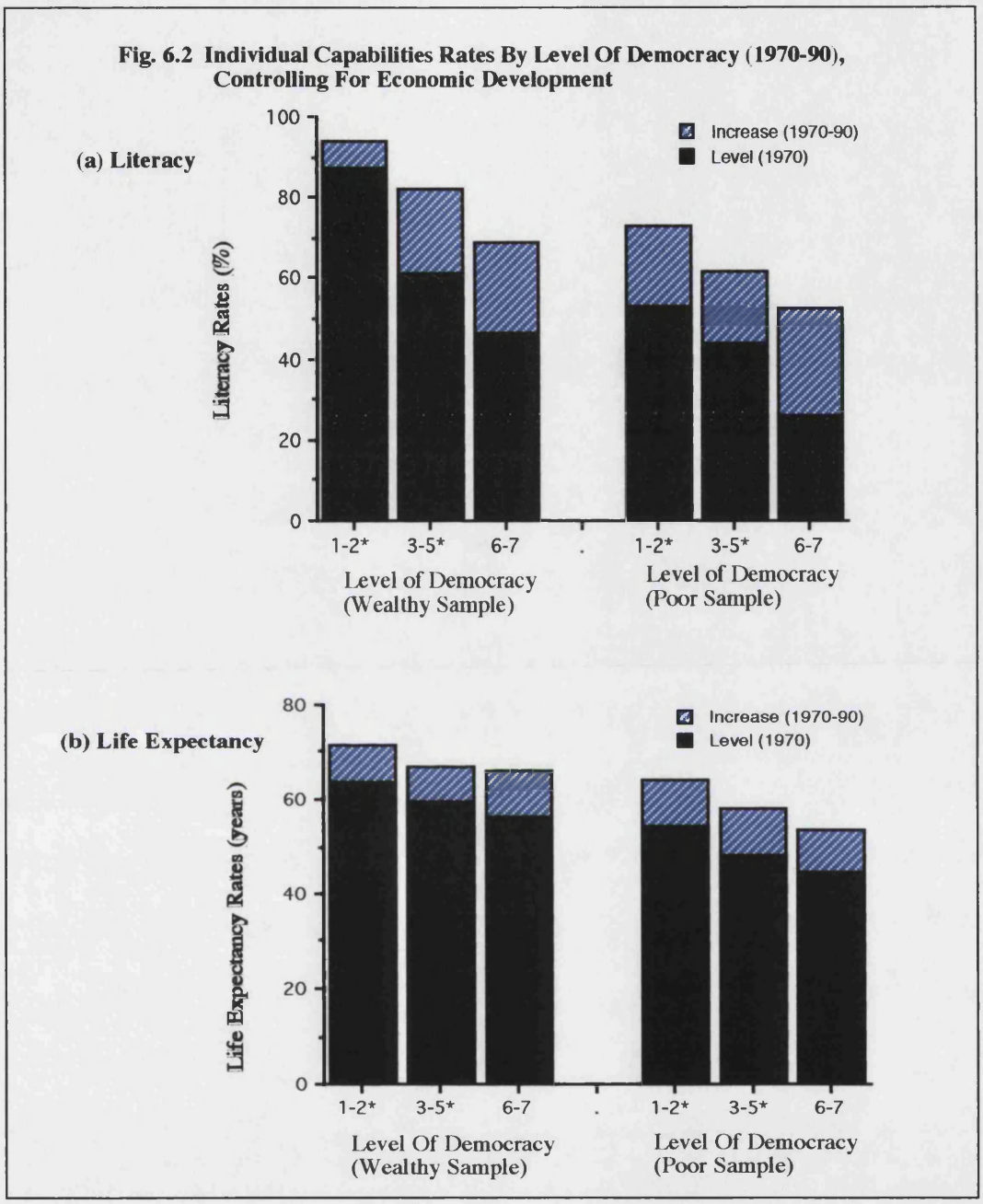
INC 1&2 (1970 GDP/C $388-4922)

LoD 1.0-2.9 (N=6):	Barbados, Jamaica, Venezuela, Peru, Costa Rica, Trinidad & Tob.,
LoD 3.0-5.9 (N=12):	Uruguay, Argentina, Mexico, Hong Kong, Brazil, Singapore, Zambia, South Africa, Panama, UAE, Iran, Gabon
LoD 6.0-7.0 (N=7):	Kuwait, Chile, Saudi Arabia, Libya, Cuba, Iraq, Guinea

INC 3&4 (1970 GDP/C $54-378)

LoD 1.0-2.9 (N=11):	India, Sri Lanka, Dom. Rep, Colombia, PapuaNG, Mauritius, Turkey, Gambia, Malaysia, El Salvador, Honduras.
LoD 3.0-5.9 (N=22):	Botswana, Ecuador, Bolivia, Guatemala, Paraguay, Nicaragua, South Korea, Philippines, Thailand, Bangladesh, Madagascar, Uganda, Zimbabwe, Pakistan, Nigeria, Senegal, Indonesia, Morocco, Sierra Leone, Nepal, Sudan, Liberia
LoD 6.0-7.0 (N=30):	Tanzania, Egypt, Lesotho, Kenya, Burkina Faso, Tunisia, Jordan, Ivory Coast, Syria, Algeria, Mozambique, Ghana, Cameroon, Rwanda, China, Haiti, Malawi, Zaire, Congo, Chad, Togo, Angola, Central Afr. Rep., Afghanistan, Niger, Mali, Burundi, Myanmar, Benin, Somalia

Fig. 6.2 Individual Capabilities Rates By Level Of Democracy (1970-90), Controlling For Economic Development



The findings regarding life expectancy rates (graph b) closely mirror the patterns for literacy rates. In the wealthy sample, democracies displayed a lower average increase (7.8 years) than the non-democratic (6-7) states (9.8 years). But since they began the period at a somewhat higher average level (63.7 years, compared to 56.5 years for non-democratic (6-7) states), they also ended up at a higher level in 1990 (71.5 years, compared to 66.3 years for non-democratic (6-7) states); the non-democratic (3-5*) states

produced an average increase of 7.4 years (up to 66.8 years in 1990). In the poor sample, the democratic and non-democratic (3-5*) states produced almost identical rate increases over the period (9.5 and 9.8 years). The differences in average life expectancy rates in 1970 (54.4 and 48.3 years) meant that the democratic states ended the period at a higher average level (63.9 years, compared to 58.1 years for the non-democratic (3-5*) states). The non-democratic (6-7) states started from a lower average level (44.6 years) and produced the smallest average increase (8.8 years).

The results involving the liberty indicators were quite similar (Figure 6.3). Looking first at the child survival rates (graph a), democratic states began and ended the period at the highest average levels in both samples: from 92.6% to 96.1% for the wealthy sample; and from 84.6% to 91.1% for the poor sample. This partly explains the smaller rate increase for the wealthy democracies (3.5%, compared to 4.8% for the non-democratic (3-5*) states and 6.2% for the non-democratic (6-7) states). In the poor sample, the average increases were indistinguishable: 6.6% for the democratic states, 6.3% for the non-democratic (3-5*) states and 6.4% for the non-democratic (6-7) states. The gaps between the LoD groups therefore remained intact by 1990: 91.1% of children survived to the age of five in poor democracies, compared to 86.7% of children in non-democratic (3-5*) states and 83.4% of children in non-democratic (6-7) states.

When child survival increases are combined with changes in levels of civil liberties, the average changes in Liberty Index values may be depicted (graph b). Given their much higher Liberty Index levels to begin with (0.815 and 0.709), the democratic states in both samples were expected to produce comparatively smaller average increases (0.071 and 0.015). Primarily as a result of improvements in their civil liberties values, the non-democratic (3-5*) states exhibited the highest LIB increases in the wealthy and poor samples (0.108 and 0.129); on the whole, democratic states had very little room to improve in terms of civil liberties. The negligible changes in levels of civil liberties shown by non-democratic (6-7) states tempered whatever progress they made towards improving child survival rates; with LIB rates of 0.046 and 0.060, their LIB levels increased marginally from 0.471 to 0.516 in the wealthy sample, and from 0.373 to 0.434 in the poor sample.

Fig. 6.3 Liberty Indicator Rates By Level of Democracy (1970-90), Controlling For Economic Development

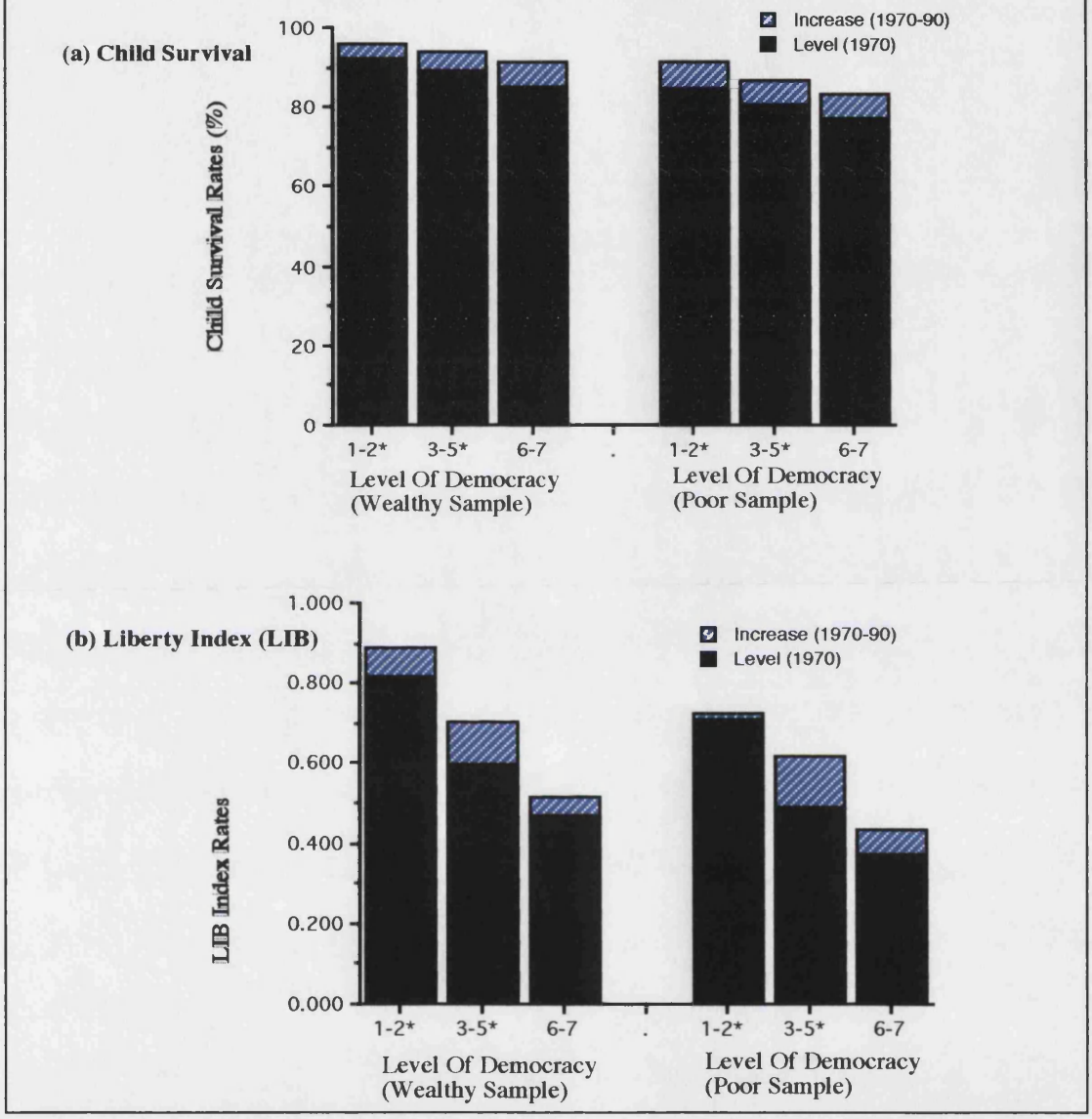
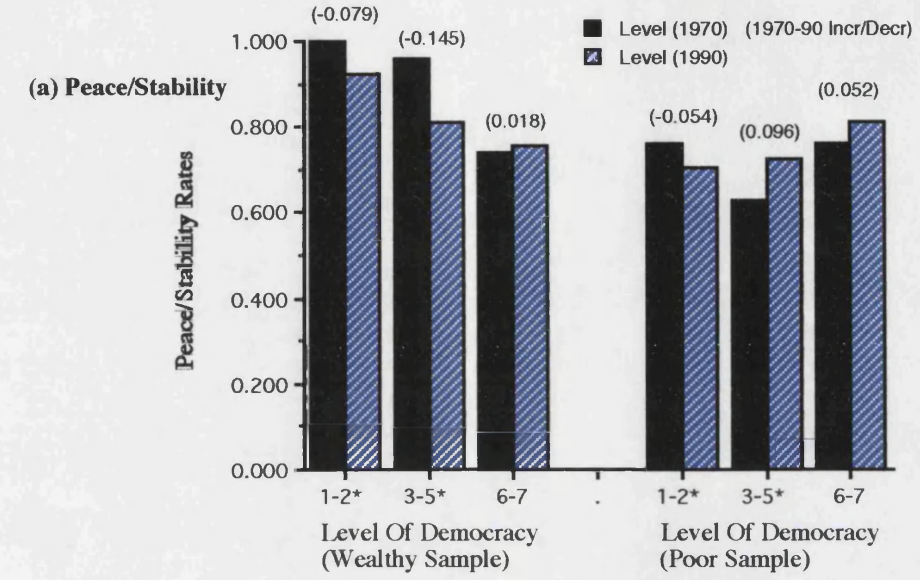
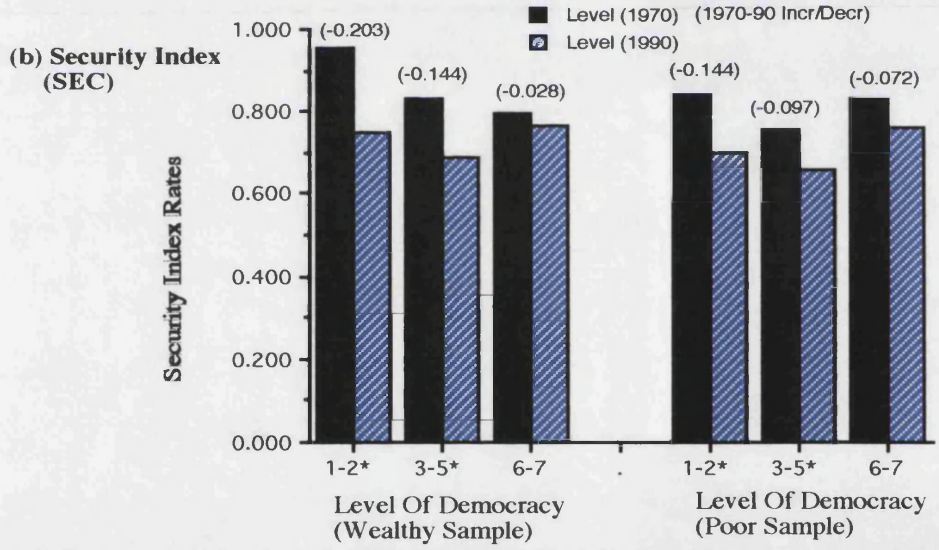


Figure 6.4 portrays the changes in levels of security over the period. With respect to the peace/stability (CONF) measure (graph a), democratic states produced mixed results. In the wealthy sample, democratic states began and ended the period at the highest levels (1.000 and 0.921); the slight average decrease (-0.079) was due entirely to Peru's decline from 1.000 in 1970 to 0.524 in 1990 (owing to the conflict with the Shining Path). The dramatic decline for the non-democratic (3-5*) states (-0.145) was largely affected by the plight of Iran, which went from one extreme to the other over the period (i.e., from a value of 1.000 in 1970 to a value of 0.000 in 1990). The non-democratic (6-7) states showed a slight improvement (0.018).

Fig. 6.4 Security Indicator Rates By Level Of Democracy (1970-90), Controlling For Economic Development





In the poor sample, democratic states began the period at the same average level of peace/stability as the non-democratic (6-7) states (0.759). But whereas the non-democratic (6-7) states produced an increase of 0.052 by 1990, democratic states had an average decrease of -0.054 as a consequence of deteriorating conditions in four countries: El Salvador (-0.728); Colombia (-0.308); Sri Lanka (-0.279); and Turkey (-0.069). The non-democratic (3-5*) states displayed the highest increase (0.096). By 1990, the poor democracies stood at the lowest average level of peace/stability (0.705, compared to 0.725 for the non-democratic (3-5*) states and 0.811 for the non-democratic (6-7) states).

When the impact of inflation rates is factored in, changes in the Security Index may be traced (graph b). A quick glance reveals that democratic states did not fare well.

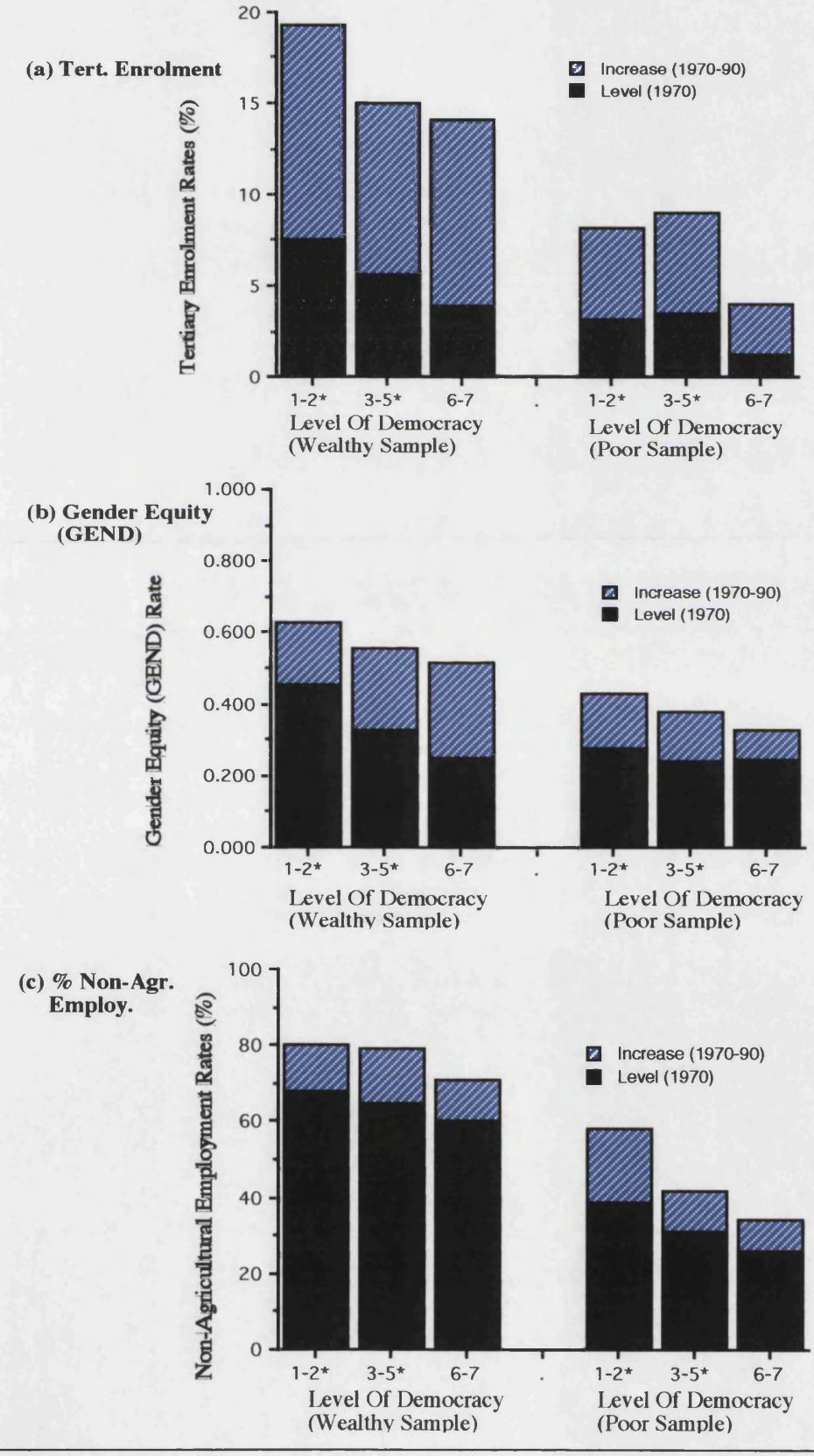
In the wealthy sample, democratic states began the period at the highest SEC level (0.954) but saw their collective fortunes deteriorate by a steep margin (-0.203) by 1990; indeed, five of the six wealthy democracies (save for Barbados) displayed negative SEC rates, ranging from a modest -0.033 for Trinidad and Tobago to a severe -0.634 for Peru. The large average decrease in SEC values for the non-democratic (3-5*) states (-0.144), coupled with an almost negligible decrease for the non-democratic (6-7) states (-0.028), meant that all three LoD groups displayed SEC values below 0.800 by 1990: 0.751 for the democratic states; 0.689 for the non-democratic (3-5*) states; and 0.766 for the non-democratic (6-7) states.

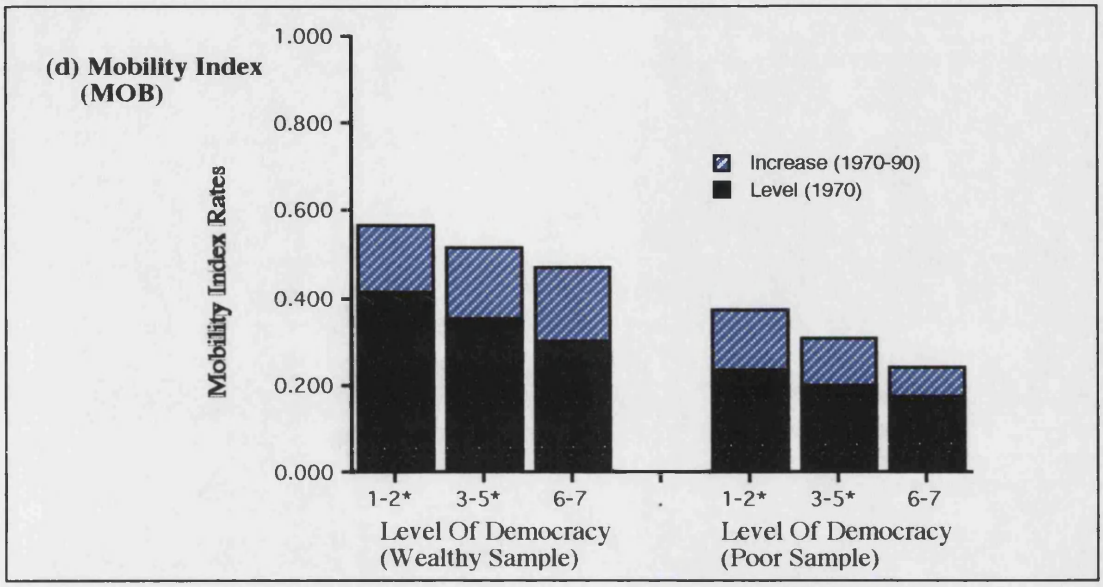
Whereas all three LoD groups produced negative SEC rates in the poor sample, the average decrease for the democratic states (-0.144) was the most noteworthy. Of the eleven poor democracies, only India and Honduras exhibited positive SEC rates (0.121 and 0.097); the worst affected were Turkey and El Salvador (-0.426 and -0.533). The non-democratic (3-5*) and non-democratic (6-7) states saw their respective average SEC levels decrease by -0.097 (from 0.755 to 0.658) and -0.072 (from 0.833 to 0.761). Despite having the highest average SEC value in 1970 (0.841), the poor democracies ended the period at a lower SEC level (0.697) than the non-democratic (6-7) states (0.761); the non-democratic (3-5*) states began and ended the period at the lowest SEC levels (0.755 and 0.658).

The four illustrations comprising Figure 6.5 demonstrate that democratic states in both samples performed largely on par with the non-democratic states in terms of improving levels of social mobility. Regarding tertiary enrollment (TERT) rates (graph a), the three LoD groups produced almost identical increases in the wealthy sample (11.8, 9.4 and 10.2). Democratic states therefore began and ended the period at higher levels (7.5 and 19.2). In the poor sample, the democratic and non-democratic (3-5*) states had similar average TERT values in 1970 (3.2 and 3.5), and almost identical TERT increases over the period (5.0 and 5.5); the non-democratic (6-7) states showed an average TERT increase of 2.8, from 1.2 in 1970 to 4.0 in 1990.

The results for democratic states were mixed in terms of gender equity (GEND) rates (graph b). In the wealthy sample, democratic states began and ended the period at the highest average GEND levels (0.452 and 0.627), but produced the smallest GEND increase (0.175); the non-democratic (3-5*) and non-democratic (6-7) states produced GEND increases of 0.226 and 0.267. The relatively worse record for the democratic states may not be explained by their higher average starting level, since, unlike other cases (e.g. literacy), they still had ample room to improve on the fixed GEND scale. In the poor sample, however, democratic states did produce the highest average GEND increase (0.154); the rates for the non-democratic groups were 0.140 and 0.083. The poor

Fig. 6.5 Mobility Indicator Rates By Level Of Democracy (1970-90), Controlling For Economic Development





democracies thus began and ended the period at the highest GEND levels (0.273 and 0.427), but not by much: the non-democratic (3-5*) states had increased their average GEND level from 0.238 to 0.378; and the non-democratic (6-7) states improved more modestly, from 0.246 to 0.330.

The findings for % non-agricultural employment (%NAgr) rates varied by sample (graph c). Among the wealthy states, the three LoD groups displayed comparable increases over the period: 12%, 14%, and 11%. Very little also separated their respective %NAgr levels in either 1970 (68%, 65% and 60%) or 1990 (80%, 79% and 71%). In the poor sample, democratic states produced the highest increase (19%), raising their average %NAgr level from 39% to 58%. The non-democratic (3-5*) and non-democratic (6-7) states produced increases of 11% and 8%, thereby raising their respective levels to 42% and 34% by 1990. Owing to the modest rate difference between the democratic and non-democratic (3-5*) states (8%), too much should not be read into these results.

Given the similar rate increases for its constituent indicators, it is not surprising that the rate increases for the Mobility Index (MOB) were also broadly similar (graph d). In the wealthy sample, democratic states exhibited a slightly lower increase (0.152) than the non-democratic (3-5*) and non-democratic (6-7) states (0.164 and 0.170); but having started from a higher average MOB level (0.412), they still ended the period at a higher level (0.563), barely above the non-democratic (3-5*) states (0.514). Conversely, in the poor sample, the average MOB increase for the democratic states (0.137) was slightly higher than the increase for the non-democratic (3-5*) states (0.108); the non-democratic (6-7) states displayed a MOB increase of only 0.067. Hence, the average MOB levels in

1990 were similar for both the democratic and non-democratic (3-5*) states (0.371 and 0.308), with the non-democratic (6-7) states further behind (0.242).

The above findings confirm that no LoD group consistently displayed the highest indicator rates (Table 6.8 summarizes the results, and the average levels at the beginning/end of the period are given in parentheses below the rates). In the wealthy sample, the democratic states began and ended the period at higher average levels in almost every case (save for the Security Index). For four indicators (life expectancy, tertiary enrollment, % non-agricultural employment, and the Mobility Index) they performed largely on par with the non-democratic states. Although democratic states produced lower performance rates for the remaining six indicators, it would be misleading to read too much into this: for three of these indicators (literacy, child survival, and the Liberty Index) the more incremental increases may be explained by the already high average levels at the beginning of the period; and for one indicator (peace/stability) the dismal record of one state (Peru) had a significant impact on the average rate. Taking these factors into consideration, it may be argued that, in the wealthy sample, democratic states did not perform as well for only two indicators, the Security Index and gender equity.

In the poor sample, democratic states began and ended the period at higher average levels for seven of the ten indicators (the exceptions being peace/stability, the Security Index and tertiary enrollment). They exhibited broadly similar performance rates as the non-democratic states for exactly half of the indicators: life expectancy, child survival, tertiary enrollment, gender equity, and the Mobility Index. The democratic states displayed lower rates for four indicators; although, once again, the special circumstances in the case of two indicators should be acknowledged: while they fell short of the non-democratic (6-7) states in terms of increases in literacy rates (albeit by only 7%), democratic states were, on average, twice as literate to begin with (53% compared to 26%); they were also bound to produce more incremental increases in LIB values given their already high LIB level in 1970 (0.709). There were, in essence, only two indicators for which the poor democracies did not fare particularly well, peace/stability and the Security Index. The only indicator for which they produced the highest average increase was the % NAgr rate.

Therefore, across both samples, democratic states did not compare favourably for only the Security Index over the 1970-90 period. In most other cases, the differences between the democratic and non-democratic states were either slight or could be explained by other factors (e.g. considerably higher indicator levels for democratic states in 1970). For one indicator, gender equity, the results differed by sample: democratic states had the lowest average increase for the wealthy sample but the highest average increase for the poor sample.

Table 6.8 Average Indicator Performance Rates (1970-90)
By Level of Democracy, Controlling For Economic Development

Indicator	WEALTHY (INC1&2) Level of Democracy 1-2*	3-5*	6-7	POOR (INC 3&4) Level of Democracy 1-2*	3-5*	6-7
Literacy (%)	7 (87/94)	21 (61/82)	23 (46/69)	20 (53/73)	18 (44/62)	27 (26/53)
Life Exp (yrs)	7.8 (63.7/71.5)	7.4 (59.5/66.8)	9.8 (56.5/66.3)	9.5 (54.4/63.9)	9.8 (48.3/58.1)	8.8 (44.6/53.4)
ChildSur (%)	3.5 (92.6/96.1)	4.8 (89.3/94.1)	6.2 (85.2/91.4)	6.6 (84.6/91.1)	6.3 (80.4/86.7)	6.4 (77.0/83.4)
LIB Index**	0.071 (.815/.886)	0.108 (.595/.703)	0.046 (.471/.516)	0.015 (.709/.724)	0.129 (.490/.619)	0.060 (.373/.434)
CONF**	-0.079 (1.000/.921)	-0.145 (.958/.813)	0.018 (.738/.755)	-0.054 (.759/.705)	0.096 (.629/.725)	0.052 (.759/.811)
SEC Index**	-0.203 (.954/.751)	-0.144 (.834/.689)	-0.028 (.795/.766)	-0.144 (.841/.697)	-0.097 (.755/.658)	-0.072 (.833/.761)
Tert Enr. (%)	11.8 (7.5/19.2)	9.4 (5.6/15.0)	10.2 (3.9/14.2)	5.0 (3.2/8.2)	5.5 (3.5/9.0)	2.8 (1.2/4.0)
GEND**	0.175 (.452/.627)	0.226 (.329/.555)	0.267 (.249/.516)	0.154 (.273/.427)	0.140 (.238/.378)	0.083 (.246/.330)
NAgr (%)	12 (68/80)	14 (65/79)	11 (60/71)	19 (39/58)	11 (31/42)	8 (26/34)
MOB Index**	0.152 (.412/.563)	0.164 (.350/.514)	0.170 (.301/.471)	0.137 (.234/.371)	0.108 (.199/.308)	0.067 (.175/.242)

Notes. **Scale ranges from 1.000 (highest) to 0.000 (lowest)

Controlling For Indicator Levels: Literacy, Life Expectancy, Child Survival and Gender Equity

Having considered the average performance rates across all indicators once levels of economic development were controlled for, this section will examine the specific changes in the levels of four key indicators - adult literacy, life expectancy, child survival and gender equity - once the initial 'take-off' levels are controlled for.

Democratic states did not appear to perform as well in terms of adult literacy rates over the period (Figure 6.6): they displayed lower average increases among the states at the three highest literacy levels. The rate differences were, however, extremely modest: only 4% separated the democratic and non-democratic (6-7) states at the 30-59% literacy level; only 2% separated the democratic and non-democratic (3-5*) states at the 60-79% level; and only 4% separated the democratic and non-democratic (3-5*) states at the 80%+ level (two of the four democratic states, Barbados and Jamaica, had almost completely literate populations in 1970, thereby accounting for the lower average increase). The actual increases for the LoD groups (1-2*, 3-5*, 6-7) were: 24%, 22% and 28% (30-59% level); 14%, 16% and 10% (60-79% level); 3%, 7% and 6% (80%+ level). The lone democratic state at the 0-29% literacy level, Gambia, had a slightly higher increase (30%) than the average for the non-democratic (6-7) states (28%); the non-democratic (3-5*) states showed the lowest average increase (23%).

Fig. 6.6 Average Literacy Rate Increases (1970-90), Controlling For Literacy Levels (1970)

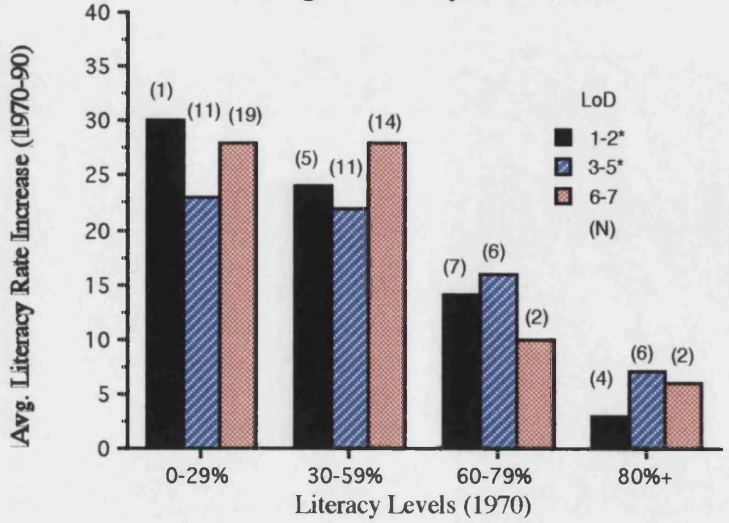


Table 6.9 gives the rate increase for each developing democracy and shows how the increase compared against the average for all states beginning from the same literacy level in 1970 (+/-Avg). At the 30-59% literacy level, Papua New Guinea and Turkey produced above average increases (33% and 30%), whereas Honduras (22%), El Salvador (18%) and India (16%) produced below average increases. At the 60-79% level, three countries (Malaysia, the Dominican Republic and Peru) had above average increases, one country (Venezuela) equaled the level average, and three countries (Sri Lanka , Mauritius and Colombia) produced slightly below average increases. Five of the seven democratic states hovered around the average increase for the level (14%), while Malaysia (20%) and Colombia (9%) exhibited the highest and lowest increases. The performance of democracies at the 80%+ level cannot be generalized: given their already high levels in 1970, it was impossible for Barbados and Jamaica to surpass the average for the level (6%); Costa Rica and Trinidad and Tobago fell just 1% shy of the average increase.

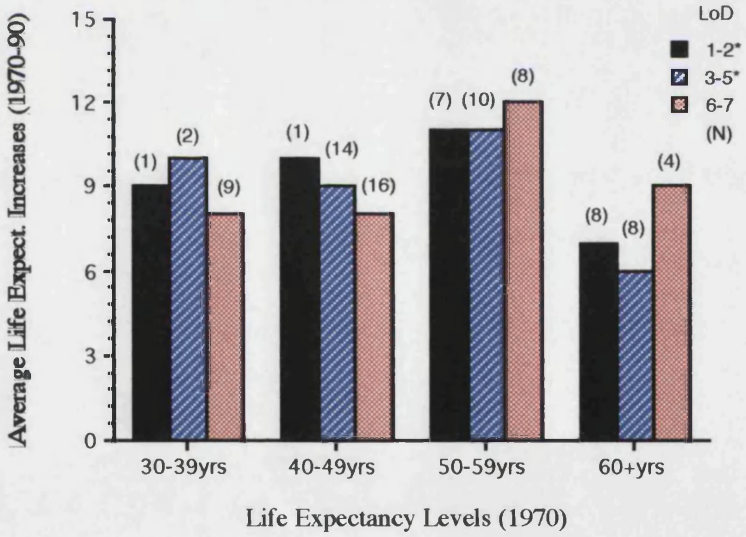
Table 6.9 Literacy Rate Increases (1970-90) In Comparative Perspective, Developing Democracies

Level 1970	Country	Value 1970	Value 1990	Increase 1970-90	+/- Avg (Level)*	Rank (Level)**
0-29%	Gambia	6	36	30	+4	10
30-59%	India	34	50	16	-9	25
	Papua NG	32	65	33	+8	6
	Turkey	52	82	30	+5	11
	El Salvador	57	75	18	-7	24
	Honduras	53	75	22	-3	20
60-79%	Venezuela	75	89	14	0	9
	Sri Lanka	77	89	12	-2	11
	Dom. Rep.	67	84	17	+3	3
	Colombia	78	87	9	-5	15
	Mauritius	68	80	12	-2	12
	Malaysia	60	80	20	+6	2
	Peru	71	86	15	+1	5
80%+	Costa Rica	88	93	5	-1	6
	Barbados	99	100	1	-5	12
	Trinidad &T.	92	97	5	-1	7
	Jamaica	97	99	2	-4	11

Notes. *The country's increase compared to the average increase for all countries starting from the same 1970 level. The average increases per level were: 26% (0-29%), 25% (30-59%), 14% (60-79%), and 6% (80%+). **The country's increase ranked against all countries starting from the same 1970 level. The number of countries per level were: 31 (0-29%), 30 (30-59%), 15 (60-79%), 12 (80%+).

The rate differences across the four life expectancy levels were negligible (Figure 6.7). At the two uppermost levels, where most developing democracies were concentrated, the non-democratic (6-7) states produced the highest rate increases. However, an average of only 1 year separated the rate increases for the democratic (11yrs) and non-democratic (6-7) states (12 yrs) at the 50-59 yrs level, and an average of 2 years separated the two groups (7 yrs and 9 yrs, respectively) at the 60+yrs level. At the 30-39 yrs level, Gambia's rate increase (9 yrs) fell just short of the average increase (10 yrs) for the non-democratic (3-5*) states, whereas, conversely, at the 40-49yrs level the increase for Papua New Guinea (10 yrs) was slightly better than the average increase for the non-democratic (3-5*) states (9 yrs); the rate increase for the non-democratic (6-7) states at both levels was 8 yrs.

Fig. 6.7 Average Life Expectancy Rate Increases (1970-90), Controlling For Life Expectancy Levels (1970)



When evaluated against the averages found for all states at similar life expectancy levels in 1970, the democratic states had mixed success (Table 6.10). Gambia and Papua New Guinea both showed above average increases at their respective levels and both placed within the top third set of ranks (Gambia was ranked 4th of 12, Papua New Guinea was 9th of 31). Of the seven democratic states at the 50-59yrs level, two (Honduras and Peru) had above average increases, one (Malaysia) equaled the average for the level, and four (India, Dominican Republic, Turkey and El Salvador) had below average increases.

Table 6.10 Life Expectancy Rate Increases (1970-90) In Comparative Perspective, Developing Democracies

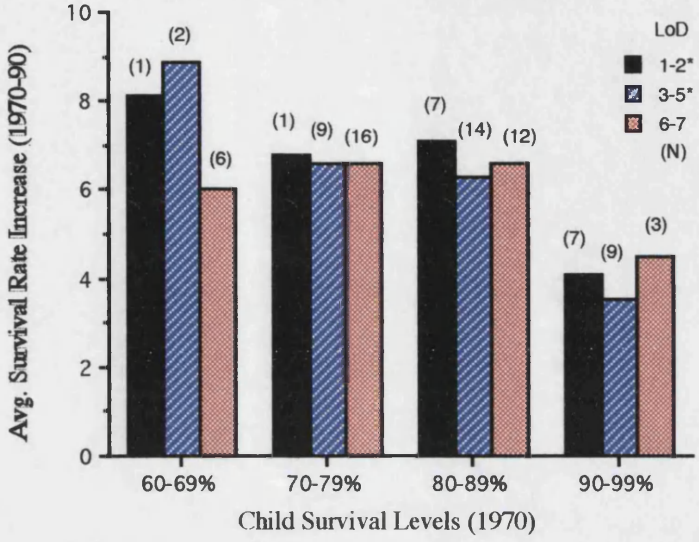
Level 1970	Country	Value 1970	Value 1990	Increase 1970-90	+/- Avg (Level)*	Rank (Level)**
30-39yrs	Gambia	35yrs	44	9	+1	4
40-49yrs	Papua NG	45	55	10	+2	9
50-59yrs	India	50	60	10	-1	15
	Dom. Rep.	57	67	10	-1	16
	Turkey	58	67	9	-2	19
	Malaysia	59	70	11	0	12
	El Salvador	56	65	9	-2	21
	Peru	52	64	12	+1	8
	Honduras	51	65	14	+3	4
60+yrs	Costa Rica	66	76	10	+3	3
	Barbados	69	75	6	-1	16
	Venezuela	64	70	6	-1	12
	Trinidad &T.	65	71	6	-1	13
	Sri Lanka	65	71	6	-1	13
	Jamaica	66	73	7	0	10
	Colombia	60	69	9	+2	5
	Mauritius	62	70	8	+1	7

Notes. *The country's increase compared to the average increase for all countries starting from the same 1970 level. The average increases per level were: 8yrs (30-39yrs), 8yrs (40-49yrs), 11yrs (50-59yrs), and 7yrs (60+yrs). **The country's increase ranked against all countries starting from the same 1970 level. The number of countries per level were: 12 (30-39yrs), 31 (40-49yrs), 25 (50-59yrs), and 20 (60+yrs).

Only Honduras (4th of 25) and Peru (8th) placed among the top third set of ranks. At the 60+yrs level, four of the eight democracies displayed increases which were slightly below the level average (7 yrs): Barbados, Venezuela, Trinidad and Tobago, and Sri Lanka all had increases of 6 yrs. Jamaica equaled the level average, while Costa Rica (10 yrs), Colombia (9 yrs) and Mauritius (8 yrs) produced above average increases. Excluding these three, which were ranked 3rd (of 20), 5th, and 7th, the remaining five democratic states were located among the bottom ten ranks.

Democratic states performed largely on par with respect to child survival rates (Figure 6.8). At the 60-69% level, Gambia's survival rate increase (8.1%) was only fractionally less than the average (8.9%) for the non-democratic (3-5*) states; the non-democratic (6-7) states produced an average increase of only 6.0%. At the 70-79% level, the rate increases were identical: 6.8% for the sole democracy, India, and 6.6% for both the non-democratic (3-5*) and non-democratic (6-7) states. The seven democratic states at the 80-89% level produced an average increase of 7.1%, marginally ahead of the non-

Fig. 6.8 Average Child Survival Rate Increases (1970-90), Controlling For Survival Levels (1970)



democratic (3-5*) states at 6.3% and the non-democratic (6-7) states at 6.6%. At the 90-99% level, the rates for the democratic and non-democratic (6-7) states were virtually indistinguishable (4.1% and 4.5%), with a slightly lower rate (3.5%) observed for the non-democratic (3-5*) states.

The records of democratic states against the rate averages (+/-Avg) varied by level (Table 6.11). At the lowest survival level (60-69%), Gambia produced an above average increase (8.1%), placing it among the middle ranks (4th of 9). At the 70-79% level, India's increase (6.8%) essentially equaled the average for the level, thereby giving it a moderate rank (11th of 26). Of the seven democracies at the next level (80-89%), four displayed above average rates (Papua New Guinea, Turkey, El Salvador and Honduras), one (Colombia) equaled the level average, and two (the Dominican Republic and Peru) displayed below average increases. Turkey's increase (9.3%) was twice Peru's (4.7%), thereby giving the former a rank of 3rd (of 33) for the level and the latter a rank of 27th. The results at the highest survival level (90-99%) were fairly nondescript: two democracies (Sri Lanka and Mauritius) had above average increases; four (Costa Rica, Barbados, Jamaica and Malaysia) essentially equaled the level average (3.7%); and two (Venezuela and Trinidad and Tobago) displayed slightly below average increases.

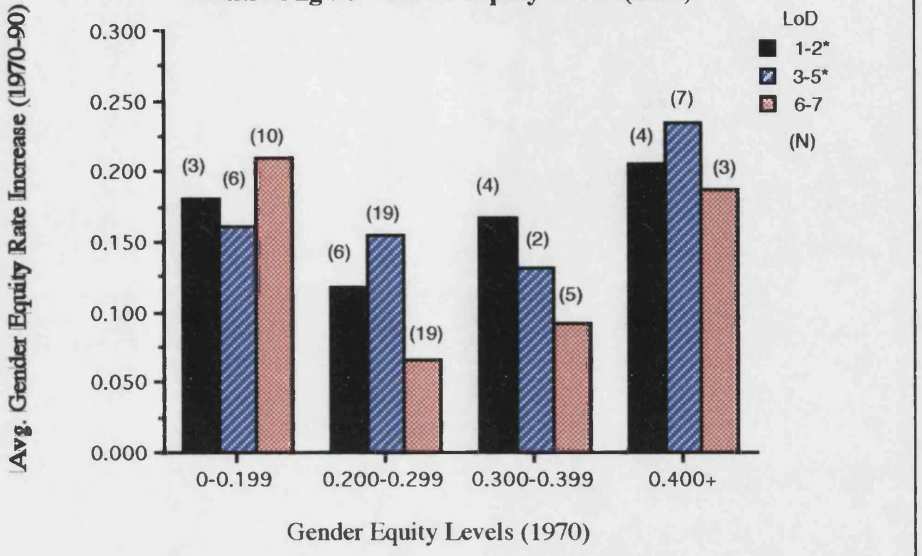
Table 6.11 Child Survival Rate Increases (1970-90) In Comparative Perspective, Developing Democracies

Level 1970	Country	Value 1970	Value 1990	Increase 1970-90	+/- Avg (Level)*	Rank (Level)**
60-69%	Gambia	67.8%	75.9	8.1	+1	4
70-79%	India	78.7	85.5	6.8	0	11
80-89%	Dom. Rep.	87.3	92.0	4.7	-2	26
	Colombia	88.3	95.0	6.7	0	16
	Papua NG	83.4	91.7	8.3	+1	6
	Turkey	81.7	91.0	9.3	+2	3
	El Salvador	83.5	91.0	7.5	+1	11
	Peru	83.4	88.1	4.7	-2	27
	Honduras	81.5	89.7	8.2	+2	7
90-99%	Costa Rica	94.1	98.2	4.1	0	6
	Barbados	94.6	98.5	3.9	0	9
	Venezuela	93.2	95.6	2.4	-1	17
	Trinidad &T.	95.8	98.2	2.4	-1	18
	Sri Lanka	92.0	96.4	4.4	+1	5
	Jamaica	94.4	97.9	3.5	0	12
	Malaysia	93.7	97.0	3.3	0	13
	Mauritius	92.3	97.1	4.8	+1	4

Notes. *The country's increase compared to the average increase for all countries starting from the same 1970 level (rounded up). The average increases per level were: 6.9% (60-69%), 6.6% (70-79%), 6.6% (80-89%), and 3.7% (90-99%). **The country's increase ranked against all countries starting from the same 1970 level. The number of countries per level were: 9 (60-69%), 26 (70-79%), 33 (80-89%), and 20 (90-99%).

Democratic states fared worse in terms of gender equity (Figure 6.9). Specifically, they came out second best at three of the four levels. At the lowest level (0-0.199), the non-democratic (6-7) states produced the highest average GEND increase (0.210), followed by the democratic states (0.181) and the non-democratic (3-5*) states (0.160). At the 0.200-0.299 level, the non-democratic (3-5*) states produced a considerably better average increase (0.154) than the democratic states (0.118); the non-democratic (6-7) states were well behind (0.066). Only at the upper-middle level (0.300-0.399) did democratic states display the highest average increase (0.167, compared to 0.131 for the non-democratic (3-5*) states and 0.092 for the non-democratic (6-7) states). At the 0.400+ level, the democratic states showed a lower average increase (0.205) than the non-democratic (3-5*) states (0.234), while the non-democratic (6-7) states produced the lowest increase (0.187).

Fig. 6.9 Average Gender Equity Rate Increases (1970-90), Controlling For Gender Equity Levels (1970)



The relatively poorer showing was also reflected in the large number of below average democratic states (Table 6.12). At the 0-0.199 level, the Dominican Republic produced an above average increase, both Papua New Guinea and Honduras did not (although Honduras fell just shy of the mark). At the 0.200-0.299 level, only Colombia and Mauritius produced above average increases; their ranks, 7th and 9th (of 44), were quite respectable. The remaining four states at this level (India, Turkey, Gambia, El Salvador) produced below average increases; India barely fell short of the average for the level (0.111). The records were somewhat evenly split at the 0.300-0.399 level: Peru and Malaysia showed significant increases, ranking first and second at this level; Costa Rica's increase was just slightly below average; and Venezuela produced a noticeably lower increase (ranking 8th of 11). At the highest level (0.400+), Trinidad and Tobago had an above average rate, Sri Lanka essentially equaled the average for the level (0.216), and both Jamaica and Barbados showed below average increases (it should be noted that Barbados already had a very high gender equity value in 1970, 0.728).

Table 6.12 Gender Equity (GEND) Rate Increases (1970-90) In Comparative Perspective, Developing Democracies

Level 1970	Country	Value 1970	Value 1990	Increase 1970-90	+/- Avg (Level)*	Rank (Level)**
0-0.199	Dom. Rep.	0.186	0.486	0.300	+0.100	5
	Papua NG	0.192	0.261	0.069	-0.121	11
	Honduras	0.173	0.347	0.174	-0.016	15
0.200-0.299	India	0.263	0.367	0.104	-0.007	15
	Colombia	0.288	0.519	0.231	+0.120	7
	Mauritius	0.290	0.518	0.229	+0.118	9
	Turkey	0.244	0.283	0.040	-0.071	29
	Gambia	0.263	0.309	0.047	-0.064	26
	El Salvador	0.262	0.318	0.057	-0.054	23
0.300-0.399	Costa Rica	0.307	0.421	0.114	-0.012	6
	Venezuela	0.358	0.440	0.082	-0.044	8
	Malaysia	0.371	0.597	0.226	+0.100	2
	Peru	0.304	0.551	0.247	+0.121	1
0.400+	Barbados	0.728	0.900	0.173	-0.043	10
	Trinidad &T.	0.466	0.738	0.271	+0.055	4
	Sri Lanka	0.472	0.686	0.214	-0.002	7
	Jamaica	0.550	0.713	0.163	-0.053	12

Notes. *The country's increase compared to the average increase for all countries starting from the same 1970 level. The average increases per level were: 0.190 (0-0.199), 0.111 (0.200-0.299), 0.126 (0.300-0.399), and 0.216 (0.400+). **The country's increase ranked against all countries starting from the same 1970 level. The number of countries per level were: 19 (0-0.199), 44 (0.200-0.299), 11 (0.300-0.399), and 14 (0.400+).

Three general points may be made on the basis of the above analysis. First, when controls were made for similar take-off levels, democratic states, for the most part, performed as well as the best performing non-democratic group (LoD 3-5* or 6-7) in terms of increases in adult literacy, life expectancy and child survival, but compared less favourably in terms of increases in levels of gender equity. Given the broad similarities in average performance rates, therefore, the level of democracy accounted for very little, if anything.

Second, it was shown that the rate increases for developing democracies did not consistently exceed the average increases produced by all countries starting from similar starting levels in 1970 (Table 6.13 below summarizes the findings). Excluding Jamaica and Barbados (which were already at extremely high levels), only 6 of the 15 democracies had literacy rate increases above the averages for their respective starting levels. These findings were mirrored for the other three indicators: 7 of the 17

Table 6.13 Evaluating the Records of Developing Democracies (1970-90) Against The Average Increases For Their Starting Levels (1970), Selected Indicators

Democracy	Lit	LExp	Surv	GEND
Gambia	+	+	+	-
India	-	-	=	-
Papua NG	+	+	+	-
Turkey	+	-	+	-
El Salvador	-	-	+	-
Honduras	-	+	+	-
Venezuela	=	-	-	-
Sri Lanka	-	-	+	-
Dominican Rep	+	-	-	+
Colombia	-	+	=	+
Mauritius	-	+	+	+
Malaysia	+	=	=	+
Peru	+	+	-	+
Costa Rica	-	+	=	-
Barbados	-	-	=	-
Trinidad & Tobago	-	-	-	+
Jamaica	-	=	=	-

Notes for each indicator are found in Tables 6.9 to 6.12 above.
+/- means above/below average for level, = means equals average for level

democracies had above average life expectancy rate increases (2 equaled their level averages); 7 had above average child survival rate increases (6 equaled their level averages); and 6 had above average gender equity rate increases. Strictly speaking, then, the majority of developing democracies *did not* surpass the average rate increases for their levels (although many equaled the averages, especially for the child survival indicator). Furthermore, no democracy managed to produce above average increases for all four indicators. Four democracies had above average rates for three indicators (Papua New Guinea, Mauritius, Peru and Gambia), five democracies had above average rates for two indicators (Turkey, Honduras, the Dominican Republic, Colombia, Malaysia), four democracies had above average rates for only one indicator (Costa Rica, El Salvador, Sri Lanka, Trinidad and Tobago), and four democracies failed to surpass the level averages for any indicator (Barbados, India, Jamaica and Venezuela).

Third, given their records against the level averages, it is not surprising that individual democratic states were infrequently found among the very top performers at each level (Table 6.14 below). More accurately, less than one-quarter of the developing democracies displayed top five performance ranks for any specific indicator. Four democratic states had top five literacy increases (Papua New Guinea at the 30-59% level, and Malaysia, the Dominican Republic, and Peru at the 60-79% level), four had top five life expectancy increases (Gambia at the 30-39yrs level, Honduras at the 50-59yrs level, and Costa Rica and Colombia at the 60+yrs level), four had top five child survival

Table 6.14 The Top Five Performing States (1970-90)
By Starting Level (1970), Selected Indicators

Indic	Level 1* Country	LoD	Incr	Level 2 Country	LoD	Incr	Level 3 Country	LoD	Incr	Level 4 Country	LoD	Incr
Lit (%)	UAE	5.4	57%	Tunisia	6.3	37%	Singapore	4.5	21%	Paraguay	4.0	11%
	SaudiAr	6.6	55	SouthAfr	5.3	35	Malaysia	2.6	20	Panama	5.3	9
	Malawi	6.7	44	Jordan	6.3	35	DomRep	2.0	17	SKorea	4.1	8
	IvoryC.	6.4	38	Botswana	3.0	34	Brazil	4.2	16	Cuba	6.8	8
	Tanzania	6.0	36	PapuaNG	2.1	33	Peru	2.8	15	Philipp	4.1	7
LExp (yrs)	Senegal	5.1	11yrs	Indonesia	5.5	16yrs	Tunisia	6.3	15yrs	Chile	6.3	11yrs
	Chad	6.8	10	Bolivia	3.4	16	SaudiAr	6.6	15	China	6.7	11
	Angola	6.8	10	Lesotho	6.2	13	Algeria	6.5	15	Costa R	1.0	10
	Gambia	2.5	9	Camer.	6.5	12	Honduras	2.9	14	Mexico	3.3	10
	BurkFaso	6.2	9	Botswana	3.0	11	Guatem.	3.4	14	Colombia	2.1	9
Surv (%)	Liberia	5.9	9.4%	Egypt	6.0	14.4%	Iran	5.7	13.2%	Thailand	4.4	6.2%
	Malawi	6.7	8.5	Algeria	6.5	10.7	Tunisia	6.3	11.8	UAE	5.4	5.7
	SierraL	5.6	8.4	Madagas.	4.6	10.5	Turkey	2.4	9.3	China	6.7	5.6
	Gambia	2.5	8.1	Benin	7.0	10.2	SaudiAr	6.6	9.0	Mauritius	2.2	4.8
	BurkFaso	6.2	7.4	Sudan	5.7	7.9	Indonesia	5.5	8.3	Sri Lanka	1.8	4.4
Gend	UAE	5.4	0.443	Cuba	6.8	0.556	Peru	2.8	0.247	SKorea	4.1	0.376
	Egypt	6.0	0.352	SouthAfr	5.3	0.394	Malaysia	2.6	0.226	HongK	4.0	0.317
	Algeria	6.5	0.345	Mexico	3.3	0.290	Congo	6.8	0.226	Chile	6.3	0.278
	Libya	6.7	0.324	Zimbab.	4.9	0.264	Brazil	4.2	0.160	Trinid.	1.8	0.271
	DomRep	2.0	0.300	Ecuador	6.0	0.249	Lesotho	6.2	0.141	Kuwait	6.1	0.250

Note. *Level 1: 0-29% (Lit), 30-39yrs (LExp), 60-69% (Surv), 0-0.199 (GEND)
Level 2: 30-59% (Lit), 40-49yrs (LExp), 70-79% (Surv), 0.200-0.299 (GEND)
Level 3: 60-79% (Lit), 50-59yrs (LExp), 80-89% (Surv), 0.300-0.399 (GEND)
Level 4: 80%+ (Lit), 60+yrs (LExp), 90-99% (Surv), 0.400+ (GEND)

increases (Gambia at the 60-69% level, Turkey at the 80-89% level, and Mauritius and Sri Lanka at the 90-99% level), and four had top five gender equity increases (the Dominican Republic at the 0-0.199 level, Peru and Malaysia at the 0.300-0.399 level, and Trinidad and Tobago at the 0.400+ level). There were four democracies with top five ranks for *two* indicators: Gambia (literacy, child survival); Malaysia (literacy, gender equity); the Dominican Republic (literacy, gender equity); and Peru (literacy, gender equity). To place this observation in perspective, four autocratic Middle Eastern states were among the top five ranks for *three* indicators: Saudi Arabia (excluding gender equity), the UAE (excluding life expectancy), Tunisia (excluding gender equity), and Algeria (excluding literacy).

6.3 Summary of Chapter Findings

Conclusions Regarding Democracy and Social Indicator Levels in the Developing World

Over the 1970-90 period, democracy was strongly correlated (predictably) with only the measures of 'liberty' (civil liberties and the Liberty Index), and was moderately correlated with the measures of 'individual capabilities' (literacy and life expectancy) and the measures of 'social mobility' (tertiary enrollment, gender equity, non-agricultural employment and the Mobility Index); there was no relationship between levels of democracy and the measures of 'security' (peace/stability, inflation and the Security Index). Given that the level of economic development also appears to influence the indicators, albeit to varying degrees, no clear-cut relationships can be established between democracy and any of the indicators, save for the liberty indicators (Table 6.1). Moreover, there were tremendous variations in indicator rates both across and within all three levels of democracy (Table 6.2).

After controlling for similar levels of economic development, democratic states, on average, produced the highest indicator values, although the differences between the three levels of democracy were not great (sometimes indistinguishable) and usually masked wide rate fluctuations within each level (Table 6.3).

After controlling for regional variations, democratic states did not consistently display the highest indicator averages across and within each developing region (Table 6.4); democratic states fared better in Latin America.

A large percentage of democratic states displayed indicator rates above the averages found for all developing states (Figure 6.1), although these numbers were heavily influenced by wealthy democracies, principally from Latin America (Table 6.5).

Conclusions Regarding Democracy and Social Indicator Performance Rates in the Developing World

The level of democracy did not, in general, have any observable impact on changes in indicator levels over the period. In particular, extremely weak correlations were found between levels of democracy and changes in the levels of adult literacy, life expectancy, child survival, the Liberty Index, peace/stability, the Security Index, tertiary enrollment, gender equity, % non-agricultural employment, and the Mobility Index (Table 6.6). As expected, indicator performance rates varied considerably across and within each level of democracy (Table 6.7).

When levels of economic development were controlled for, the average performance rates for the democratic and non-democratic states were broadly similar for

every indicator except the Security Index, where democratic states performed worse (Figures 6.2-6.5, Table 6.8).

When starting levels were controlled for, democratic and non-democratic states produced similar average increases in adult literacy (Figure 6.6), life expectancy (Figure 6.7), and child survival (Figure 6.8); democratic states fared slightly worse in terms of gender equity rates (Figure 6.9). However, the majority of democratic states displayed, relative to their starting levels in 1970, below average increases in literacy, life expectancy, child survival and gender equity (Tables 6.9-6.13). Moreover, democratic states were not well represented among the very top performers for any of the four indicators (Table 6.14).

CHAPTER 7
EXAMINING THE 'VIRTUOUS CYCLE' OF DEVELOPMENT: DEMOCRACY AND THE DEVELOPMENTAL STATE

The preceding chapters provided empirical evidence detailing the dual nature of the relationship between democracy and human development. Accordingly, it is argued that democracy is most likely to be the by-product of human development, not its catalyst. Given that the level of democracy has no real influence on human development performance, it is important to examine which variable, if any, does.

The key appears to be economic growth. Indeed, this chapter will demonstrate that by expanding "the material base for the fulfillment of human needs" (UNDP 1996: 66), economic growth is the engine most likely to propel a country to a higher developmental plateau. But while the UNDP proclaims that strong economic growth and human development are mutually reinforcing phenomena which underpin a 'virtuous cycle' of development, a belief also shared by the World Bank (1991: 36), there does not, however, appear to be any relationship between a country's ability to establish such a 'virtuous cycle' and its level of democracy. This suggests the need to consider an argument best articulated in the work of Adrian Leftwich: the most exceptional performers, 'developmental states', are characterized not by regime-type or level of democracy but by the *nature and role of the 'state'*.

This chapter is divided into five sections. Section 7.1 examines the general relationship between economic growth and human development. Section 7.2 considers whether there is a general relationship between economic growth and democracy, thus exploring the possibility that the level of democracy might at least have an indirect impact on human development performance (through economic growth). Section 7.3 examines which level of democracy, if any, appears most likely to translate economic growth into human development gains. Section 7.4 assesses Leftwich's thesis and then identifies the developmental states for the 1970-90 period. Section 7.5 summarizes the findings.

7.1 Economic Growth and Human Development

General Patterns

Chapter 1 provided an overview of the debate which has raged among theorists and policy-makers alike with respect to the relative priority to be assigned to economic growth and human development as developmental objectives. The idea of viewing both as desirable and co-realizable was shown to be quite recent, and owes much to the publication of the

UNDP's first Human Development Report in 1990. This section will consider the relationship between the two objectives in the context of the 1970-90 period.[1]

A succinct theoretical explanation of how economic growth and human development are related is provided in the 1996 Human Development Report. In brief, the UNDP contends that the two phenomena are linked in a 'virtuous cycle': economic growth is likely to promote higher human development performance; in turn, higher levels of human development are likely to reinforce economic growth. In the first part of the equation, economic growth increases the disposable income available to households, thereby increasing in principle the income available for expenditure on basic needs. Economic growth also increases the revenue available to governments for public expenditure in general, and 'social priority spending' in particular (UNDP 1996: 70). The second part of the equation is based on the premise that "healthy, well-educated people make an economy more productive" (UNDP 1996: 75). While the UNDP goes to great lengths to emphasize that improving human conditions is a goal in itself, a case is also made for the economic benefits which accompany an increase in 'human capital' (UNDP 1996: 76).

The UNDP's thesis therefore considers both the impact of economic growth on human development *performance* and the impact of human development *levels* on economic growth. In working towards an examination of the 'developmental state' later in this chapter, where high economic growth is combined with high human development performance, it is the first part of the UNDP's argument which is of primary concern here. However, given the additional importance attached to the second part of the argument by the UNDP, and in order to evaluate the performances of similarly-situated groups of countries, the subsequent analysis will control for levels of human development where necessary.

Table 7.1 confirms that the UNDP is largely correct: there is a general relationship between economic growth and human development performance. Positive and moderate correlations are produced throughout for both the All States and Developing States samples, although the correlations are stronger in the latter case. The correlations are very similar for both the HDI and I-HDI performance rates, but somewhat weaker for ISC rates. In the All States sample, it appears as if economic growth may, at most, account for roughly 22% of the variation in HDI rates (39% for Developing States), 16% of the variation in ISC rates (18% for Developing States), and 28% of the variation in I-HDI rates (38% for the Developing States). In the Developing States sample, the correlations tend to be noticeably stronger over the longer period (1970-90).

[1]Unless specified otherwise, the principal variables to be employed are the GNP per capita (GNP/C) rate (1965-90) and the I-HDI performance rate (1970-90). The values are found in Appendix Q (GNP/C) and Appendix O (I-HDI).

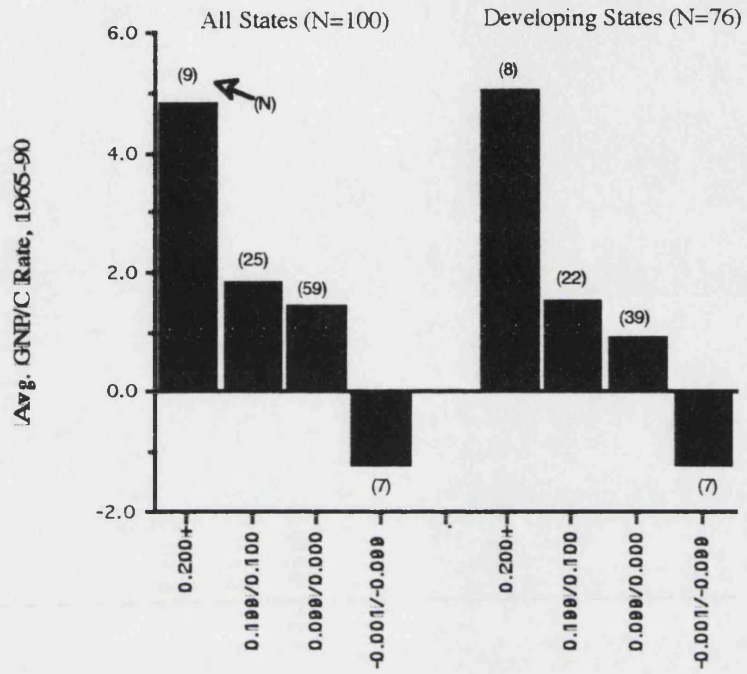
Table 7.1 Correlations Between Economic Growth and Human Development Performance

Index		All States 1970/80	All States 1980/90	All States 1970/90	Developing States 1970/80	Developing States 1980/90	Developing States 1970/90
HDI	r=	0.464	0.305	0.420	0.542	0.507	0.622
	r^2=	0.215	0.093	0.177	0.294	0.257	0.387
ISC	r=	0.279	0.295	0.402	0.268	0.297	0.421
	r^2=	0.078	0.087	0.162	0.072	0.088	0.177
I-HDI	r=	0.431	0.370	0.532	0.453	0.462	0.620
	r^2=	0.186	0.137	0.283	0.205	0.213	0.384

Notes: 1. The period correlations are index 1970/80 with GNP/C avg 1965/80, index 1980/90 with GNP/C avg 1980/92, and index 1970/90 with GNP/C avg 1965/90.
2. Sample sizes (N): For All States, 1970/80 (116), 1980/80 (115), 1970/90 (100); For Developing States, 1970/80 (89), 1980/90 (85), 1970/90 (76)

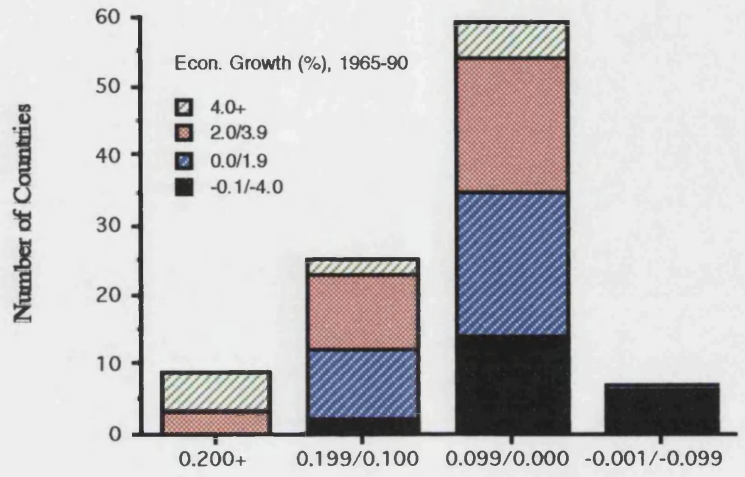
These correlations suggest that human development performance and economic growth tend to be complementary phenomena. This is certainly evident in Figure 7.1, which depicts the average rates of economic growth behind the aggregate human development scores (1970-90). In the All States sample, the nine countries which produced I-HDI increases of 0.200+ over the 1970-90 period displayed a very high average rate of economic growth (4.8%). In stark contrast, the seven countries which actually experienced a decline in human development conditions over the period (negative I-HDI rates) displayed a negative average rate of economic growth (-1.2%). Countries falling within the 0.199/0.100 performance range had an average GNP/C rate of 1.8%, while countries in the performance group below (0.099/0.000) had a slightly lower average GNP/C rate of 1.4%. This exact pattern is mirrored for the Developing States sample: countries with extremely high human development increases (0.200+) also displayed by far the highest average rate of economic growth (5.0%), whereas countries with negative I-HDI rates displayed a negative average rate of economic growth (-1.2%); countries with moderate human development increases (0.199/0.100) had a higher average rate of economic growth (1.5%) than countries with modest I-HDI increases (0.9%).

Fig. 7.1 Average Rates of Economic Growth By Human Development Performance Groups



Judging from the distributional patterns in Figure 7.2 below (given for the All States sample), the average growth rates do not conceal any noteworthy discrepancies. When countries are grouped according to human development performance and economic growth, the general tendencies observed above remain valid, although it becomes clear that the relationship is not automatic. Of the nine countries with extremely high I-HDI performance rates (0.200+), six grew at average GNP/C rates of 4.0% or more, while the other three grew at fairly decent rates (2.0/3.9%). Twenty-one of the 25 countries in the next highest I-HDI performance group (0.199/0.100) produced economic growth rates between 0.0/3.9%, two produced very high growth rates (4.0%+), and two produced negative growth rates. The majority of countries in the sample (59 of 100) displayed only modest I-HDI performance rates (0.099/0.000), of which only five had economic growth rates of 4.0%+ (the other economic growth brackets were fairly evenly represented). At the extreme end of the scale, 6 of the 7 countries with negative I-HDI performance rates also had negative economic growth rates.

Fig. 7.2 Distribution of Countries By Economic Growth (1965-90) and Human Development Performance (1970-90)



From the reverse perspective, the thirteen countries with high economic growth rates (4.0%+) were evenly distributed between the highest I-HDI performance group (6 countries) and the very modest I-HDI performance group (5 countries), with two countries in the moderate (0.199/0.100) performance group. The 33 countries with economic growth rates between 2.0/3.9% were largely located in the two middle I-HDI performance groups, as were the 32 countries with growth rates between 0.0/1.9%. Most of the countries with negative growth rates (14 of 22) produced very modest I-HDI rates (0.099/0.000). Hence, it may be argued that strong economic growth is (almost) a necessary though insufficient condition for high human development performance.

This last statement deserves further analysis. Table 7.2 (overleaf) provides a detailed breakdown of the economic growth rates produced by the top/bottom 10 human development performers (section a), and the average human development increases produced by the top/bottom 10 economic growth states (section b). For the sake of clarity, human development levels are controlled for in both cases (countries have been separated into Medium and Low I-HDI categories, depending on where they stood in 1970).

One may first confirm that the best human development scores were typically accompanied by the highest economic growth rates, and vice versa. At the Medium Level, the top I-HDI performers displayed an average economic growth rate of 2.8%, compared to an average rate of -0.4% for the worst performers. Furthermore, the top performers at the

Table 7.2 Comparing the Top and Bottom Country Ranks (Human Development Performance and Economic Growth), Controlling For Levels of Human Development

	(a) By I-HDI Performance Rank					(b) By Economic Growth Rank				
I-HDI Level	Ra	Country	I-HDI Incr	EcGr %	EcGr Ra	Ra	Country	EcGr %	I-HDI Incr	I-HDI Ra
MED	1	Korea, S.	0.287	7.1	1	1	Korea, S.	7.1	0.287	1
	2	Thailand	0.223	4.4	5	2	Singapore	6.5	0.099	11
	3	Chile	0.183	0.4	20	3	Hong Kong	6.2	0.078	18
	4	Malaysia	0.163	4.0	6	4	Paraguay	4.6	0.086	13
	5	Panama	0.142	1.4	15	5	Thailand	4.4	0.223	2
	6	Mauritius	0.141	3.2	7	6	Malaysia	4.0	0.163	4
	7	Philippines	0.118	1.3	17	7	Mauritius	3.2	0.141	6
	8	Saudi Arab	0.111	2.6	11	8	Sri Lanka	2.9	0.024	24
	9	Uruguay	0.104	0.8	19	9	Ecuador	2.8	0.100	10
	10	Ecuador	0.100	2.8	9	10	Mexico	2.8	0.009	28
		T10 Avg		*2.8*			*T10 Avg*		*0.121*	
	22	Bolivia	0.031	-0.7	27	22	Papua New G.	0.1	0.057	21
	23	Jamaica	0.026	-1.3	29	23	Trinidad & T.	0.0	0.080	16
	24	Sri Lanka	0.024	2.9	8	24	Peru	-0.2	-0.016	29
	25	Venezuela	0.013	-1.0	28	25	Argentina	-0.3	0.057	20
	26	South Afr.	0.013	1.3	18	26	El Salvador	-0.4	-0.021	30
	27	Kuwait	0.012	-4.0	31	27	Bolivia	-0.7	0.031	22
	28	Mexico	0.009	2.8	10	28	Venezuela	-1.0	0.013	25
	29	Peru	-0.016	-0.2	24	29	Jamaica	-1.3	0.026	23
	30	El Salvador	-0.021	-0.4	26	30	Nicaragua	-3.3	-0.041	31
	31	Nicaragua	-0.041	-3.3	30	31	Kuwait	-4.0	0.012	27
		B10 Avg		*-0.4*			*B10 Avg*		*0.020*	
LOW	1	Indonesia	0.331	4.5	4	1	Botswana	8.4	0.244	2
	2	Egypt	0.304	4.1	5	2	China	5.8	0.223	5
	3	Botswana	0.244	8.4	1	3	Lesotho	4.9	0.080	27
	4	Syria	0.238	2.9	11	4	Indonesia	4.5	0.331	1
	5	Tunisia	0.231	3.2	8	5	Egypt	4.1	0.204	2
	6	China	0.223	5.8	2	6	Burundi	3.4	0.181	9
	7	Pakistan	0.191	2.5	12	7	Brazil	3.3	0.180	10
	8	Libya	0.190	-3.0	45	8	Tunisia	3.2	0.231	4
	9	Burundi	0.181	3.4	6	9	Congo	3.1	0.116	15
	10	Brazil	0.180	3.3	7	10	Cameroon	3.0	0.082	25
		T10 Avg		*3.5*			*T10 Avg*		*0.187*	
	36	Madagascar	0.030	-1.9	40	36	Cen. Afr. R.	-0.5	0.054	32
	37	Zaire	0.028	-2.2	42	37	Senegal	-0.6	0.120	14
	38	Rwanda	0.028	1.0	19	38	Chad	-1.1	0.082	24
	39	Tanzania	0.015	-0.2	35	39	Ghana	-1.4	0.010	40
	40	Ghana	0.010	-1.4	39	40	Madagascar	-1.9	0.030	36
	41	Sudan	0.004	0.0	30	41	Zambia	-1.9	-0.027	43
	42	Uganda	-0.012	-2.4	44	42	Zaire	-2.2	0.028	37
	43	Zambia	-0.027	-1.9	41	43	Niger	-2.4	0.058	30
	44	Sierra Leo.	-0.050	0.0	31	44	Uganda	-2.4	-0.012	42
	45	Somalia	-0.089	-0.1	34	45	Libya	-3.0	0.190	8
		B10 Avg		*-0.9*			*B10 Avg*		*0.053*	

Notes.
Ra=Rank (I-HDI Perf/EcGr), I-HDI Incr=Absolute I-HDI Increase 1970-90, EcGr=GNP/C (%) 1965-90.
MED= Medium I-HDI Level (0.799/0.500) in 1970, LOW=Low I-HDI Level (0.499/0.000) in 1970.

Low Level had an average GNP/C rate of 3.5%, compared to a miserable -0.9% for the worst performers. The same pattern holds from the opposite perspective. The top 10 economic growth states at the Medium Level displayed an I-HDI average of 0.121, whereas the bottom 10 states displayed an average of only 0.020. At the Low Level, the average I-HDI rate for the top economic growth states (0.187) dwarfed the average increase for the worst economic growth states (0.053).

While the general tendency is for human development performance to accompany economic growth, there are of course many exceptions to the rule. In fact, one may divide the countries in the table into four main groups (a more comprehensive treatment will follow in the section dealing with the 'links' between human development and economic growth).

The first group consists of those countries which displayed high human development performance *and* high economic growth (among the top 10 ranks in both samples). In addition to the exceptional case of South Korea (the top human development performer and the top economic growth state), there were four countries beginning from the Medium Level (Thailand, Malaysia, Mauritius and Ecuador) and seven from the Low Level (Indonesia, Botswana, Tunisia, China, Egypt, Brazil and Burundi) which made both top 10 lists.

The second group consists of those countries which managed to dramatically improve human development conditions (top 10) despite poor economic growth. Examples from the Medium Level over the period include Chile (0.4%, 20th rank), Panama (1.4%, 15th rank), the Philippines (1.3%, 17th rank) and Uruguay (0.8%, 19th rank). Only the erratic case of Libya could be found at the Low I-HDI Level (top 10 I-HDI rate despite having a GNP/C rate of -3%, or 45th rank in the sample).

The third group consists of those countries which managed to produce comparatively high rates of economic growth (top 10) but very little improvement in human development conditions. At the Medium I-HDI Level, one finds Sri Lanka (0.024, 24th rank) and Mexico (0.009, 28th rank). The two notable cases at the Low Level were Lesotho (0.080, 27th rank) and Cameroon (0.082, 25th rank).

The fourth group consists of those countries which displayed very poor records of human development performance and economic growth. Seven countries from the Medium Level made the bottom 10 list in both samples: Bolivia, Jamaica, Venezuela, Kuwait, Peru, El Salvador and Nicaragua. Five countries from the Low Level shared this dubious distinction, all from sub-Saharan Africa: Madagascar, Zaire, Ghana, Uganda and Zambia.

Qualifying the General Relationship

The general relationship between the two variables should be qualified slightly to take into account the levels of economic and human development at the beginning of the period in question. The reason is that economic growth seems to have a considerably greater impact on human development performance in the relatively poor and less developed countries. Focusing exclusively on developing states, Figure 7.3 (overleaf) demonstrates that this was the case over the 1970-90 period.

Once similar levels of economic development were controlled for (graph a), economic growth appeared to make little difference to I-HDI performance among states in the wealthy sample (INC 1&2, N=20). The average I-HDI rates were similar for the top three economic growth brackets: 0.089 (4.0%+), 0.100 (2.0/3.9%), and 0.097 (0.0/1.9%). Those states with negative economic growth rates during the period produced a considerably lower average I-HDI increase (0.036).

The situation was altogether different, however, in the sample of poor developing states (INC 3&4, N=56). Countries with growth rates of 4.0% or higher produced an average I-HDI increase of 0.205. Those states in the next highest economic growth bracket (2.0/3.9%) produced an average performance rate of 0.130 (the other I-HDI averages were 0.072 for the 0.0/1.9% bracket and a paltry 0.025 for the states with negative economic growth rates). For the poorer states, higher economic growth appears to translate into higher human development performance.

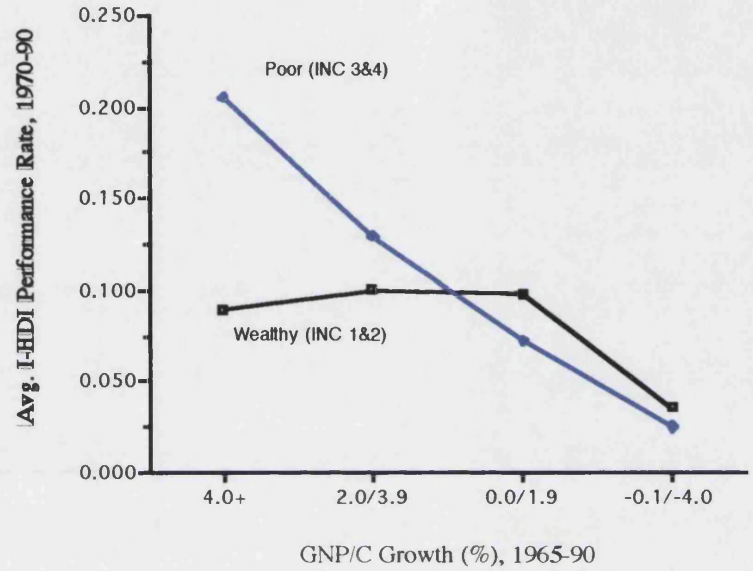
Similar patterns emerge when one controls for similar levels of human development (graph b). The High I-HDI Level (0.800+) has been omitted from the graph in order to focus on developing states (the I-HDI averages produced by the different economic growth brackets at the High I-HDI Level were virtually identical). At the Medium I-HDI Level (0.799/0.500, N=25), the highest I-HDI performance average (0.136) was produced by those states with economic growth rates of 4.0%+. The next two economic growth brackets displayed successively lower average I-HDI rates of 0.113 and 0.101, while states with negative economic growth rates produced an average I-HDI rate of only 0.019.

The same tendency, only significantly more pronounced, emerged for states at the Low I-HDI Level (0.499/0.000, N=55). The highest economic growth bracket (4.0%+) produced the highest I-HDI average (0.210), while the negative growth bracket produced the lowest I-HDI average (0.032); the averages for the other growth brackets were 0.144 (2.0/3.9%) and 0.073 (0.0/1.9%). Thus, for countries at similar levels of human development, higher economic growth suggests, on average, higher human development performance.

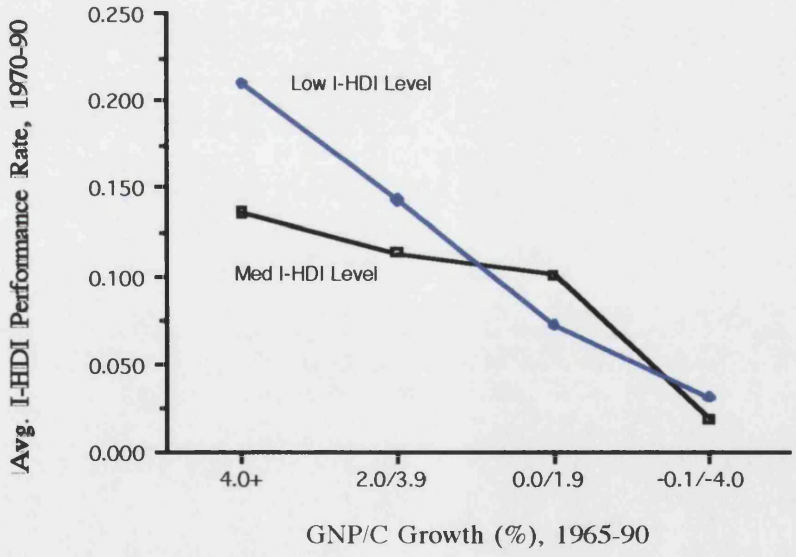
The relationship between economic growth and human development performance should also be qualified in another way. While economic growth does appear to bring about an improvement in *overall* human development conditions, as defined by the composite

Fig. 7.3 Human Development Performance and Economic Growth, Controlling For Levels of Economic and Human Development (Developing States, N=76)

(a) By INC Level



(b) By I-HDI Level



indices, it does not necessarily follow that economic growth brings about an immediate and marked improvement in the level of any *specific* indicator. The rate of economic growth has virtually no direct impact on changes in the levels of adult literacy, life expectancy, child survival and gender equity (Table 7.3).

Table 7.3 Correlations Between Economic Growth and Changes in the Levels of Four Key Indicators, Developing States (N=76)

	Lit%	LifeExp	ChildSurv	GendEq.
r=	0.022	0.192	-0.078	0.325
r^2=	0.000	0.037	0.006	0.106
Notes. Economic Growth (GNP/C 1965-90), all Indicators (1970-90)				

Nonetheless, while the relationships are by no means automatic, moderately-strong to strong economic growth does appear to make some difference. Table 7.4 presents the average increases in indicator levels (1970-90) for countries with different rates of economic growth (1965-90), controlling for indicator levels at the beginning of the period (the two middle levels on each indicator scale were selected because of the fairly even distribution of countries). The fastest growing states (4.0%+) experienced an average increase of 21% in their literacy levels, the same figure as for the negative growth states (-0.1/-4.0%). Countries with only slow growth (1.9/0.0%) actually experienced the highest average absolute increase (24%), although the increases were quite similar among all four groups. The fastest growing states did produce the highest average increases in life expectancy (12 years) and child survival (8.4%), with the smallest increases (8 years and 6.3%) shown by the negative growth states. In terms of gender equity, the average increases produced by the top two economic growth brackets were almost identical (0.169 and 0.171), with negative growth states falling well behind (0.068).

Table 7.4 Average Indicator Increases (1970-90) By Rates of Economic Growth (1965-90), Controlling For Indicator Levels

Indicator	Level (1970)	Economic Growth Rate Brackets 4.0%+	3.9/2.0%	1.9/0.0%	-0.1/-4.0%
Adult Literacy	30-79% (N)	21% (9)	20% (12)	24% (9)	21% (12)
Life Expect.	40-59yrs	12yrs (7)	10yrs (13)	9yrs (18)	8yrs (13)
Child Survival	70-80%	8.4% (4)	6.9% (15)	6.7% (18)	6.3% (13)
Gender Equity	0.200/0.399	0.169 (6)	0.171 (10)	0.110 (15)	0.068 (16)

When levels of economic development (1970) are controlled for, the results are more inconclusive (Table 7.5 shows the findings for the poor sample of developing states, INC 3&4, N=56). The worst economic performers actually produced a slightly higher average increase in literacy rates (23%) than the fastest growing states (20%). The reverse was true for life expectancy rates: the highest average increase was produced by the fastest growing states (11years), whereas the lowest increase was shared by the slow growth and negative growth states (9 years). The four groups displayed indistinguishable increases in child survival rates, ranging from 6.2% to 6.7%. As was found above in Table 7.4, countries with economic growth of 4.0%+ produced a similar average increase in gender equity levels (0.197) as the countries with growth of 3.9/2.0% (0.189); the negative growth countries had an average increase of only 0.050.

Table 7.5 Average Indicator Increases (1970-90) By Rates of Economic Growth (1965-90), Poor Sample (INC 3&4)

Indicator	Rates of Economic Growth 4.0%+	3.9/2.0%	1.9/0.0%	-0.1/-4.0%
Adult Literacy	20%	23%	22%	23%
Life Expect.	11yrs	10yrs	9yrs	9yrs
Child Survival	6.2%	6.7%	6.7%	6.5%
Gender Equity	0.197	0.189	0.084	0.050

Notes. (N)=4.0%+ (9), 3.9/2.0% (14), 1.9/0.0% (18), -0.1/-4.0% (15)

It is obvious that economic growth alone is not enough to improve the individual indicators. Other factors must also of course be taken into account, including (but not limited to) the level of government spending in these areas, and the specific policies adopted by governments.

Examining the Impact of Other Variables on Human Development Performance

Do other variables influence human development performance to the same extent as economic growth? This is a valid question to pose, for despite the strong links between the two when levels of human and economic development are controlled for, economic growth may explain, at most, around 38% of the variation in I-HDI increases (1970-90) for the sample of developing states (from Table 7.1). Given how frequently they are mentioned in

development literature, three variables in particular will be briefly considered here: the economic system;[2] the size of government;[3] and social expenditures.[4]

Judging from the extremely weak correlations in Table 7.6, one may certainly rule out the existence of a general relationship between human development performance and any of the variables. The nature of the economic system may account for less than 1% of the variation in I-HDI rates among developing states, whereas the size of government and the level of social expenditures may each account for roughly 3% of the variation in performance rates.

Table 7.6 Correlations Involving the Three Variables and Human Development Performance (Developing States)

		Econ. System (N=76)	Size of Gov't (N=58)	Social Expen. (N=53)
I-HDI Increase (1970-90)	r=	-0.091	0.172	-0.164
	r^2=	0.008	0.030	0.027

Table 7.7 below provides a detailed look at the distribution patterns for developing states, allowing one to trace I-HDI increases by variable category and to determine which variable category, if any, is best represented among each I-HDI increase bracket. The actual number of countries is given for each cell, along with the corresponding percentage in parenthesis (to place the numbers in proportional contexts).

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[2]Economic systems are classified according to the typology employed by Raymond Gastil in his *Freedom In the World* surveys. Specifically, the reference date is 1984-5 (Gastil 1985, Table 8), and five economic systems are considered: Capitalist (N=26); Capitalist-Statist (N=28); Mixed-Capitalist (N=7); Mixed-Socialist (N=12); and Socialist (N=3). Gastil divides economic systems further into 'inclusive' (modern) and 'non-inclusive' (traditional) variants, a practice which is abandoned here for the sake of simplification. Most developing states fall into the non-inclusive category (especially in the sub-Saharan Africa group). The two economic systems at either end of the spectrum, Capitalist and Socialist, require no elaboration. Capitalist-Statist countries are those "that have very large productive enterprises, either because of elitist development philosophy or major dependence on a key resource such as oil". In Mixed-Capitalist states "private control over property is sacrificed to egalitarian purposes", and capitalism's "legitimacy is grudgingly accepted by many in government". Mixed-Socialist states "proclaim themselves to be socialist but in fact allow rather large portions of the economy to remain in the private domain".

[3]The size of government is defined by the total central government expenditure as a percentage of GNP. This measure "excludes consumption expenditure by state and local governments...(but) includes government's gross domestic investment and transfer payments" (World Bank 1991: 279). The primary source for the data is the World Bank's 1991 World Development Report (Table 11) and the reference date is 1972. I have divided countries into three groups according to their levels of expenditure at the beginning of the performance period: 'Large'=25%+ (N=12); 'Medium'=15-24% (N=28); and 'Small'=5-14% (N=18). These designations were selected for purposes of illustration only.

[4]The UNDP refers to combined expenditure on education and health, expressed as a percentage of total central government spending, as the 'social allocation ratio' (UNDP 1996: 71). For the sake of simplification, the term 'social expenditures' will be used here to denote these ratios. Having first gathered expenditure data on education and health, presented separately in the various World Development Reports (particularly the 1984, 1985 and 1991 editions), I then calculated social expenditure levels for 1972 (roughly the beginning of the performance period). I divided those developing countries for which data was available into three expenditure groups: 'High'=25%+ (N=20); 'Medium'=15-24% (N=23); and 'Low'=0=14% (N=10). These designations were selected for purposes of illustration only.

Table 7.7 Distribution of Developing States By Variable Category and Human Development Performance (N and %)

Variable	Category	I-HDI Increase Brackets (1970-90) 0.200+	0.199/ 0.100	0.099/ 0.000	-0.001/ -0.099	
(a) Economic System (N=76)	CAP	3 (11%)	8 (31%)	13 (50%)	2 (8%)	/(100%)
	CAP-STAT	1 (3%)	8 (29%)	17 (61%)	2 (7%)	/(100%)
	MIX-CAP	2 (29%)	3 (43%)	1 (14%)	1 (14%)	/(100%)
	MIX-SOC	2 (17%)	2 (17%)	6 (50%)	2 (16%)	/(100%)
	SOC	-	1 (33%)	2 (67%)	-	/(100%)
(b) Size of Gov't (N=58)	Large (25%+)	2 (17%)	6 (50%)	3 (25%)	1 (8%)	/(100%)
	Med.(15-24%)	4 (14%)	6 (22%)	14 (50%)	4 (14%)	/(100%)
	Small (5-14%)	-	5 (28%)	11 (61%)	2 (11%)	/(100%)
(c) Social Expend. (N=53)	High (25%+)	1 (5%)	6 (30%)	10 (50%)	3 (15%)	/(100%)
	Med. (15-24%)	3 (13%)	4 (17%)	13 (57%)	3 (13%)	/(100%)
	Low (0-14%)	2 (20%)	4 (40%)	3 (30%)	1 (10%)	/(100%)

As may be expected given the very weak correlations, there were no discernible patterns when countries were separated by I-HDI increases and economic systems (section a). Of the eight countries with very high I-HDI rates (0.200+), three had Capitalist systems (South Korea, Botswana and Thailand), one had a Capitalist-Statist system (Indonesia), two had Mixed-Capitalist systems (Tunisia and Egypt), and two had Mixed-Socialist systems (Syria and China). Translated into percentages: 11% of the Capitalist states in the sample produced I-HDI increases of 0.200+, compared to 3% of the Capitalist-Statist states, 29% of the Mixed-Capitalist states, and 17% of the Mixed-Socialist states. The economic systems were also fairly evenly represented at the other extreme: among those countries with actual I-HDI rate decreases (-0.001/-0.099) one finds two Capitalist states, two Capitalist-Statist states, one Mixed-Capitalist state, and two Mixed-Socialist states. These numbers translate into similar percentages (8%, 7%, 14% and 16%). Perhaps most indicative of the relative distributional parity is the fact that, with the exception of Mixed-Capitalist states, roughly half of all states in each category produced very modest I-HDI rates (0.099/0.000): 50% of Capitalist states; 61% of Capitalist-Statist states; 50% of Mixed-Socialist states; and 67% of Socialist states.

Very little also distinguishes human development increases when the 'size of government' is considered (section b). Most of the six countries with high I-HDI rates (0.200+) had 'medium'-size governments (i.e., total central government expenditure as a percentage of GNP in the 15-24% range): only Botswana and Syria had what might be called 'large' governments (ratios of 25%+); although, proportionally, the 'large' and 'medium' categories were evenly represented. At the other end of the table, there is a similar

percentage breakdown in the -0.001/ -0.099 I-HDI rate bracket: 8% (large); 14% (medium); and 11% (small). The only observable difference between the categories - and a relatively minor one at that - seems to be the placement of the majority of country cases: whereas half (6) of all countries with 'large' governments produced I-HDI rates between 0.199/0.100, half (14) of all countries with 'medium' size governments, and 61% of all countries with 'small' governments, fell into the I-HDI increase group below (0.099/0.000).

Perhaps most surprisingly, there is no clear relationship between levels of social expenditures and human development performance (section c), confirming the view that it is *how* money is spent that is important, not *how much*.[5] Of the six countries with very high I-HDI increases (0.200+), only Tunisia invested over 25% of total government expenditures into education and health (Thailand, South Korea and Botswana spent between 15-24%, whereas Syria and Indonesia spent between 0-14%). To put this into perspective: Tunisia spent roughly four times more on social expenditures (38%) than Indonesia (9%), but produced a lower I-HDI increase (0.231, compared to 0.331 for Indonesia). Moreover, on a proportional basis, 'high', 'medium' and 'low' social spenders were fairly evenly represented among countries with negative I-HDI rates (15%, 13% and 10%, respectively). Little also separated the categories in the two middle I-HDI increase brackets: there were proportionally more 'low' than 'high' social spenders at the 0.199/0.100 level (40% and 30%); and the percentages of 'high' and 'medium' spenders at the 0.099/0.000 level were virtually the same (50% and 57%).

Hence, none of the three variables - the economic system, the size of government, or social expenditures - has any discernible impact on human development performance. It is therefore valid to view economic growth as the single most important factor.

7.2 Democracy and Economic Growth

General Patterns

If, as has just been demonstrated, economic growth often acts the engine behind overall human development performance, one may return to a familiar question that has preoccupied political scientists: Is there a relationship between democracy and economic growth? Most importantly, which level of democracy appears more likely to promote rapid economic growth, which in turn promotes higher human development dividends?

The findings in Table 7.8 may lead one to conclude that, of the three broad approaches outlined in Chapter 1, it is the Skeptical Perspective which is the most accurate: there is no general relationship between rates of economic growth and levels of democracy.

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[5]Within the composite I-HDI measure, the impact of social expenditures would be reflected in certain indicators in particular: the health and education components in the Human Development Index, the social deprivation (child survival) rate in the Liberty Index, and both the gender equity (female education variable) and tertiary enrolment rates in the Mobility Index.

Irrespective of sample group and period, very weak and negative correlations were produced. The r-squared values suggest that the level of democracy may explain, at most, only 2-14% of the variation in economic growth rates.

Table 7.8 Correlations Between Democracy and Economic Growth

Sample		1970/80	1980/90	1970/90
All States	r=	-0.277	-0.374	-0.207
	r^2=	0.077	0.140	0.043
Developing States	r=	-0.256	-0.258	-0.123
	r^2=	0.066	0.066	0.015
Sample Sizes (All, Devel.): 1970/80 (116, 89), 1980/90 (115, 85), 1970/90 (100, 76).				

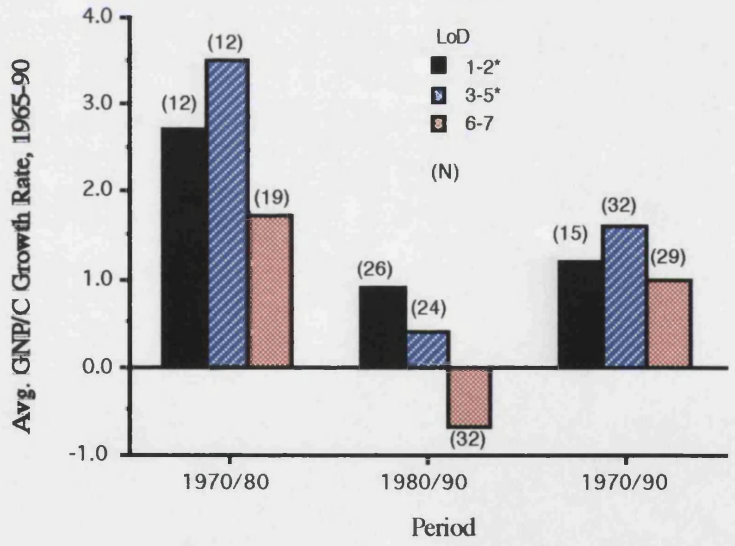
The lack of any clear-cut relationship between the two may also be demonstrated in another manner. By employing as a standard threshold the average economic growth rate for all developing states, it is possible to calculate the percentage of countries from each level of democracy with 'above average' economic growth rates (Table 7.9). During the 1970/80 period, three-quarters (75%) of all democratic states produced growth rates above the developing average, compared to 63% of all non-democratic (3-5*) states and only 37% of all non-democratic (6-7) states. In the 1980/90 period, just under half of the democratic states (46%) grew at rates above the developing average (the percentages for the two non-democratic groups were 50% and 31%). Over the entire 1970/90 period, more than half of all democracies (53%) surpassed the developing average, a marginally higher percentage than was found for the non-democratic (3-5*) and non-democratic (6-7) states (49% and 45%, respectively). As suggested by the correlations, there is very little here to separate the three levels of democracy: the democratic and non-democratic (3-5*) states had similar percentages throughout, while the non-democratic (6-7) states performed worst of all (although they were not far behind over the longer period).

Table 7.9 Percentage of Countries From Each Level of Democracy With 'Above Average' Rates of Economic Growth, Developing States (N=76)

LoD	% Above Developing Average* 1970/80 (N)	1980/90	1970/90
1-2*	75% (12)	46% (12)	53% (8)
3-5*	63% (12)	50% (12)	49% (15)
6-7	37% (19)	31% (10)	45% (13)
*The average growth rates (GNP/C) for the developing states were: 2.2% (1970/80), 0.1% (1980/90) and 1.3% (1970/90).			

Nor are any significant discrepancies revealed after computing the average rates of economic growth by level of democracy (Figure 7.4 shows the findings over three different periods for the Developing States sample). The non-democratic (3-5*) states grew at quite a high average rate (3.5%) during the 1970/80 period, followed by the democratic states (with a respectable 2.7%) and the non-democratic (6-7) states (1.7%). The averages for all three LoD groups declined noticeably over the 1980/90 period, with the democratic states producing a slightly higher average growth rate (0.9%) than the non-democratic (3-5*) states (0.4%), while the most authoritarian states produced a negative average rate (-0.7%). Over the longer period (1970/90), the non-democratic (3-5*) states (1.6%) slightly edged out the democratic states (1.2%) and the non-democratic (6-7) states (1.0%). Overall, the non-democratic (3-5*) states and democratic states were separated by only 0.4-0.8%. With its large contingent of sub-Saharan African countries, the non-democratic (6-7) group consistently grew at the slowest rates.

Fig. 7.4 Rates of Economic Growth By Level of Democracy, Developing States (N=76)

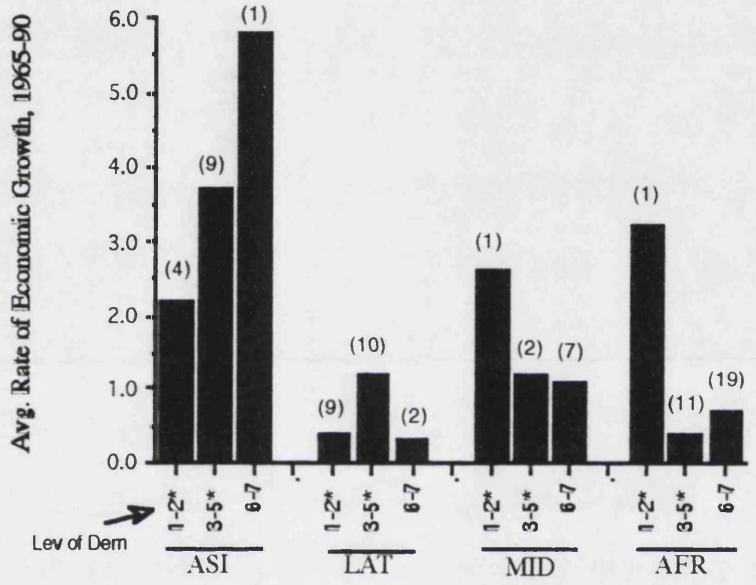


Regional Groups and Rapid Growth States

One may question the validity of lumping together, say, authoritarian states from Asia with their counterparts in sub-Saharan Africa for the sake of arriving at a neat generalization regarding the performance of *all* authoritarian states, just as one might wish to differentiate between the performances of the longer established Latin American

democracies and Turkey, the solitary 'democratic' representative in the Middle East. In order to control for variations between the four developing regions, Figure 7.5 presents the average rates of economic growth by level of democracy and region over the 1970-90 period.

Fig. 7.5 Average Rates of Economic Growth By Level of Democracy and Region



Looking across the regions, no level of democracy produced the highest average rates of economic growth throughout. The only non-democratic (6-7) state in the ASI region, China, grew at a phenomenal rate of 5.8%, compared to an impressive 3.7% for the nine non-democratic (3-5*) states and a more modest 2.2% for the four democratic states. In the LAT region, the highest average rate was produced by the non-democratic (3-5*) states (1.2%), followed by the democratic states (0.4%) and the non-democratic (6-7) states (0.3%). Turkey produced a higher economic growth rate (2.6%) than the averages for the non-democratic (3-5*) and non-democratic (6-7) states (1.2% and 1.1%) in the MID region. The only country in the sample from the AFR region to statistically qualify as a democracy for the entire period, Mauritius, grew at an impressive rate of 3.2%, significantly higher than the average rates for the two non-democratic groups (0.4% and 0.7%).

It is also worth observing that there was considerable variation within each level of democracy. For example, with a paltry average growth rate of 0.4%, democratic states in the LAT region performed much differently than their counterparts in the ASI (2.2%), MID (2.6%) and AFR (3.2%) regions. Furthermore, with an average rate of 3.7%, the non-

democratic (3-5*) states in the ASI region grew at more than three times the average rates of their counterparts in the LAT (1.2%), MID (1.2%) and AFR (0.4%) regions. The most dramatic discrepancies could be found among the non-democratic (6-7) states, where China's rate of 5.8% towered over the dismal average rates produced by non-democratic (6-7) states in the LAT (0.3%), MID (1.1%), and AFR (0.7%) regions.

The variations across the regions, and within the three levels of democracy, suggest that the ranking of regional performance groups would not reflect any concrete patterns. This is largely true (Table 7.10). The best *and* worst performing groups displayed strongly authoritarian LoD values: the non-democratic (6-7) states from the ASI and LAT regions had rates of 5.8% and 0.3%, respectively. The second-best *and* second-worst performing groups also displayed similar LoD values: the ASI non-democratic (3-5*) states had an average rate of 3.7%, while the AFR non-democratic (3-5*) states had an average of only 0.4%. With the exception of the LAT democratic (1-2*) group, which displayed an average of 0.4%, the democratic regional groups were clustered in the upper part of the table, with average rates of 3.2% (AFR 1-2*), 2.6% (MID 1-2*), and 2.2% (ASI 1-2*).

Table 7.10 Ranking Regional Groups By Rates of Economic Growth (1965-90)

Rank	Regional Group	N	GNP/C (1965-90)
1.	ASI 6-7	1	5.8%
2.	ASI 3-5*	9	3.7%
3.	AFR 1-2*	1	3.2%
4.	MID 1-2*	1	2.6%
5.	ASI 1-2*	4	2.2%
6.	LAT 3-5*	10	1.2%
6.	MID 3-5*	2	1.2%
8.	MID 6-7	7	1.1%
9.	AFR 6-7	19	0.7%
10.	LAT 1-2*	9	0.4%
10.	AFR 3-5*	11	0.4%
12.	LAT 6-7	2	0.3%

While generalizations on the basis of levels of democracy may not be warranted, it is difficult to ignore one key regional distinction brought out in the table: the ASI region fared particularly well (especially the non-democratic states). The three ASI groups were ranked first (ASI 6-7), second (ASI 3-5*) and fifth (ASI 1-2*). This is in line with the considerably higher average economic growth rate produced by the ASI region as a whole (3.4%); the average rates for the other regions were 1.3% (MID), 0.8% (LAT) and 0.7% (AFR).

The list of rapid growth states (those with GNP/C rates of 4%+) in the developing world therefore consisted largely of non-democratic states from the ASI region, the so-called NIC 'tiger economies'. Table 7.11 presents the rapid growth states for the two shorter periods (1970-80 and 1980-90) and the one longer period (1970-90). Countries are listed by decreasing rates of economic growth, along with their respective LoD values.

Table 7.11 Rapid Growth States (4.0%+) in the Developing World, 1970-90

Country	GNP/C 1965/ 1980	LoD 1970/ 1980	Country	GNP/C 1980/ 1992	LoD 1980/ 1990	Country	GNP/C 1965/ 1990	LoD 1970/ 1990
Botswana	9.9	3.6	Korea, S.	8.5	2.9	Botswana	8.4	3.0
Singapore	8.3	5.0	China	7.6	6.6	Korea, S.	7.1	4.1
Korea, S.	7.3	5.9	Botswana	6.1	2.4	Singapore	6.5	4.5
Lesotho	6.8	6.2	Thailand	6.0	3.4	Hong Kong	6.2	4.0
Brazil	6.3	5.7	Mauritius	5.6	2.0	China	5.8	6.7
Hong Kong	6.2	4.0	Hong Kong	5.5	4.0	Lesotho	4.9	6.2
Jordan	5.8	6.5	Singapore	5.3	4.1	Paraguay	4.6	4.0
Gabon	5.6	6.0	Indonesia	4.0	6.1	Indonesia	4.5	5.5
Ecuador	5.4	6.4				Thailand	4.4	4.4
Indonesia	5.2	5.0				Egypt	4.1	6.0
Syria	5.1	6.4				Malaysia	4.0	2.6
Malaysia	4.7	2.4						
Tunisia	4.7	6.5						
Thailand	4.4	6.2						
Nigeria	4.2	6.2						
Algeria	4.2	6.6						
Paraguay	4.1	3.5						
China	4.1	6.8						

The ASI region provided 7 of the 18 rapid growth states during the 1970-80 period, 6 of the 8 rapid growth states in the 1980-90 period, and 7 of the 11 rapid growth states over the entire 1970-90 period. Within this region, only Malaysia qualified statistically as a democracy (a distinction that will be scrutinized more closely in the section on developmental states). In fact, there were preciously few rapid growth states across the regions with democratic LoD values. Only Malaysia qualified in both the 1970-80 and 1970-90 periods, and three states qualified in the 1980-90 period (Botswana, Mauritius and South Korea), although South Korea's inclusion should be treated with caution, because of its relatively late conversion to democratic governance. The only truly 'multi-party' democracy appearing in the table is Mauritius, and then only for the 1980-90 period.

This last point begs another familiar question: Is there something 'inherent' in democratic structures of government which precludes the possibility of rapid economic growth over a sustained period of time, as the Conflict Perspective suggests? Given the comparatively fewer democratic states in the developing world, it is perhaps not entirely

accurate to base any firm conclusions on the absolute numbers given in Table 7.11 above. Instead, one should also take into account the number of rapid growth countries as a percentage of all countries from each level of democracy (Table 7.12).

Table 7.12 Percentage of 'Rapid Growth' States By Level of Democracy, Developing Countries

LoD	% of Rapid Growth States (GNP/C 4%+) 1970/80 (N)	1980/90	1970/90
1-2*	6% (1)	12% (3)	7% (1)
3-5*	37% (7)	13% (3)	22% (7)
6-7	19% (10)	6% (2)	10% (3)

Democratic states did not compare favourably against the non-democratic (3-5*) states, except over the 1980/90 period. Quite a high percentage (37%) of non-democratic (3-5*) states grew at rates of 4.0% or higher during 1970/80, compared to 19% of non-democratic (6-7) states and 6% of democratic states (only Malaysia). In the next period (1980/90), the democratic and non-democratic (3-5*) groups contained virtually the same percentage of rapid growth states (12% and 13%); the non-democratic (6-7) group contained roughly half as many (6%). Over the entire 1970/90 period, the non-democratic (3-5*) group contained about three times as many rapid growth states (22%), proportionally, as the democratic group (7%, only Malaysia), and more than twice as many as the non-democratic (6-7) group (10%).

Insofar as this specific period (1970-90) is concerned, democracies in the developing world may have performed as well *in general* as their non-democratic counterparts, but they rarely produced rapid economic growth over a sustained period of time. This evidence appears to support the argument that a non-democratic regime may be a necessary though insufficient condition for sustained rapid growth (this theme will be revisited in the section on developmental states).

Examining the Impact of Other Variables on Economic Growth

Given that the level of democracy has little effect on the variation in general economic growth rates, it is worthwhile to consider the possible influence of other factors. Do any of the three variables - the economic system, the size of government, or the level of social expenditure - have any observable impact on economic growth? The short answer would have to be no.

The correlations in Table 7.13 are extremely weak for all three variables. At most, the type of economic system may explain around 2.4% of the variation in economic growth rates, the size of government explains literally 0% of the variation, and the level of social expenditure may explain around 0.3%. These figures are comparable to the r-squared value produced by the level of democracy (1.5%) over the same period (Table 7.8 above).

Table 7.13 Correlations Involving the Three Variables and Economic Growth (Developing States)

		Econ. System (N=76)	Size of Gov't (N=58)	Social Expen. (N=53)
Econ. Growth (1965-90)	r=	-0.155	0.022	-0.054
	r^2=	0.024	0.000	0.003

Table 7.14 below provides a more detailed account by depicting the distribution of developing states according to variable category and economic growth bracket (the actual numbers are given along with the relative percentages for each category). No firm conclusions can be drawn regarding economic systems (section a). Although six of the eleven countries (23%) which produced rapid economic growth (4.0%+) had Capitalist systems, a slightly higher proportion of Mixed-Capitalist states (29%) were located in this growth bracket (granted, however, there were considerably fewer countries in the Mixed-Capitalist sample). Among states with moderate growth (3.9%-2.0%), those with Capitalist systems were less represented proportionally (19%) than all but the Mixed-Socialist states (17%). Just under half (46%) of all Capitalist states produced slow growth (1.9%-0.0%), a higher proportion than was found for the other categories of economic systems. However, only 12% of all Capitalist states had negative economic growth rates (-0.1%/-4.0%), compared to just over one-third (36%) of all Capitalist-Statist states, 29% of Mixed-Capitalist states, 42% of Mixed-Socialist states, and 67% of Socialist states (2 of 3).

There is certainly nothing to distinguish the economic growth brackets in terms of the size of government (section b). Four of the eight countries which produced rapid economic growth rates had 'medium'-size governments; although, more tellingly, roughly the same proportion of 'medium'-size governments (14%) produced rates of 4.0% as did 'large'- and 'small'-size governments (17% and 11%, respectively). Likewise, there was a fairly even (proportional) distribution of countries in the moderate growth (3.9%-2.0%) and slow growth (1.9%-0.0%) brackets: 25%, 25%, 17%; and 42%, 25%, 50%. Ten of the 16 countries which produced negative economic growth rates had 'medium'-size governments (proportionally, the 'large'- and 'small'-size governments were fairly evenly represented).

Table 7.14 Distribution of Developing States By Variable Category and Economic Growth (N and %)

Variable	Category	Economic Growth Brackets (1965-90) 4.0%+	3.9%/ 2.0%	1.9%/ 0.0%	-0.1%/ -4.0%	
(a) Econ. System (N=76)	CAP	6 (23%)	5 (19%)	12 (46%)	3 (12%)	/(100%)
	CAP-STA	2 (7%)	7 (25%)	9 (32%)	10 (36%)	/(100%)
	MIX-CAP	2 (29%)	2 (29%)	1 (13%)	2 (29%)	/(100%)
	MIX-SOC	1 (8%)	2 (17%)	4 (33%)	5 (42%)	/(100%)
	SOC	-	1 (33%)	-	2 (67%)	/(100%)
(b) Size of Gov't (N=58)	Large (25%+)	2 (17%)	3 (25%)	5 (42%)	2 (17%)	/(100%)
	Med. (15-24%)	4 (14%)	7 (25%)	7 (25%)	10 (36%)	/(100%)
	Small (5-14%)	2 (11%)	3 (17%)	9 (50%)	4 (22%)	/(100%)
(c) Social Expend. (N=53)	High (25%+)	2 (10%)	4 (20%)	8 (40%)	6 (30%)	/(100%)
	Med. (15-24%)	5 (22%)	6 (26%)	5 (22%)	7 (30%)	/(100%)
	Low (0-14%)	1 (10%)	2 (20%)	5 (50%)	2 (20%)	/(100%)

Very similar observations may be made regarding the relationship between social expenditure levels and economic growth rates (section c). There were only two 'high'-spending countries in the rapid economic growth bracket, compared to five 'medium'-spending countries and one 'low'-spending country (as a proportion of their respective categories, the 'high' and 'low' spenders were evenly represented, at 10%). In both the moderate growth (3.9%-2.0%) and slow growth (1.9%-0.0%) brackets, the 'high' and 'low' spenders were evenly represented (proportionally), whereas the 'high'- and 'medium'-spending countries were evenly represented in the negative growth bracket.

From the foregoing, it appears that general conclusions may not be reached concerning the relationship between economic growth and any of the three variables, nor does it seem possible to account for rapid economic growth on the basis of these variables.

7.3 Comparing Levels of Democracy: Economic Growth and Human Development Performance, 1970-90

Translating Economic Growth into Human Development Gains

The importance of economic growth to overall improvements in human development conditions has been established, as has the fact that the level of democracy has no real impact on general rates of economic growth. So which level of democracy, if any, appears to do a better job of translating economic growth - irrespective of the rate - into human development gains? In other words, if two states, one democratic and one non-democratic, are drawn from the same control group (level of human/economic development), and share a

similar rate of economic growth, which is more likely to produce greater human development returns?

Given the earlier results of this chapter, it is hardly surprising that no clear answers emerge to these questions. Part of the problem is that countries are not evenly distributed by level of democracy, economic growth, and control group (starting level). One must therefore avoid extrapolating from single- or few- country cases. A second crucial factor mitigating against any broad conclusions is that no level of democracy produced the highest human development scores on a consistent basis, irrespective of the rate of economic growth. The following two figures help to illustrate these points.

Figure 7.6 depicts the average I-HDI increases (1970-90) produced by each level of democracy after controlling for initial human development levels (Medium I-HDI or Low I-HDI) and economic growth rates over the period (1965-90). Of the countries with rapid growth rates (4.0%+) beginning from the Medium I-HDI level (0.799/0.500), the solitary democratic state, Malaysia, produced an I-HDI increase (0.163) which was fractionally better than the average I-HDI increase (0.155) produced by the five countries with LoD values in the non-democratic (3-5*) range. Among countries with growth rates of 3.9/2.0%, Saudi Arabia (LoD 6-7) produced a higher I-HDI increase (0.111) than the average increase found for the five democratic states (0.085), while the two non-democratic (3-5*) states produced an average increase of only 0.054. The only non-democratic (6-7) country among the slow growth (1.9/0.0%) states, Chile, displayed a relatively high I-HDI increase of 0.183, compared to 0.087 for the non-democratic (3-5*) states and 0.073 for the democratic states. The I-HDI increases produced by the three LoD groups with negative economic growth rates were very small: 0.001 (LoD 1-2*), 0.015 (3-5*), and 0.012 (6-7).

There were only two democratic states at the Low I-HDI Level (0.499/0.000), India and Honduras, and both produced economic growth rates between 1.9/0.0%. Their average I-HDI increase (0.125) was considerably better than the average increases for the non-democratic (3-5*) and non-democratic (6-7) states (0.069 and 0.062) with similar economic growth rates. To place this record in perspective, however, the two non-democratic (3-5*) states which exhibited economic growth rates of 4.0%+, Botswana and Indonesia, produced an average I-HDI increase of 0.288, and three other rapid growth states with LoD values of 6-7 (Egypt, China and Lesotho) produced an average I-HDI increase of 0.169; not far behind were the non-democratic (3-5*) and non-democratic (6-7) states with growth rates of 3.9/2.0%, which had average increases of 0.161 and 0.166, respectively.

Ignoring the single-country cases in the two graphs, there were only four instances where direct comparisons could be made between the records of democratic and non-democratic states with similar rates of economic growth. The results were mixed: in two of these instances (3.9/2.0% at the Medium Level and 1.9/0.0% at the Low Level) democratic states achieved greater average human development gains, and in two instances (1.9/0.0% and -0.1/-4.0% at the Medium Level) they achieved lower average gains.

Fig. 7.6 Economic Growth and Human Development Gains By Level of Democracy, Controlling For Levels of Human Development (Developing States)

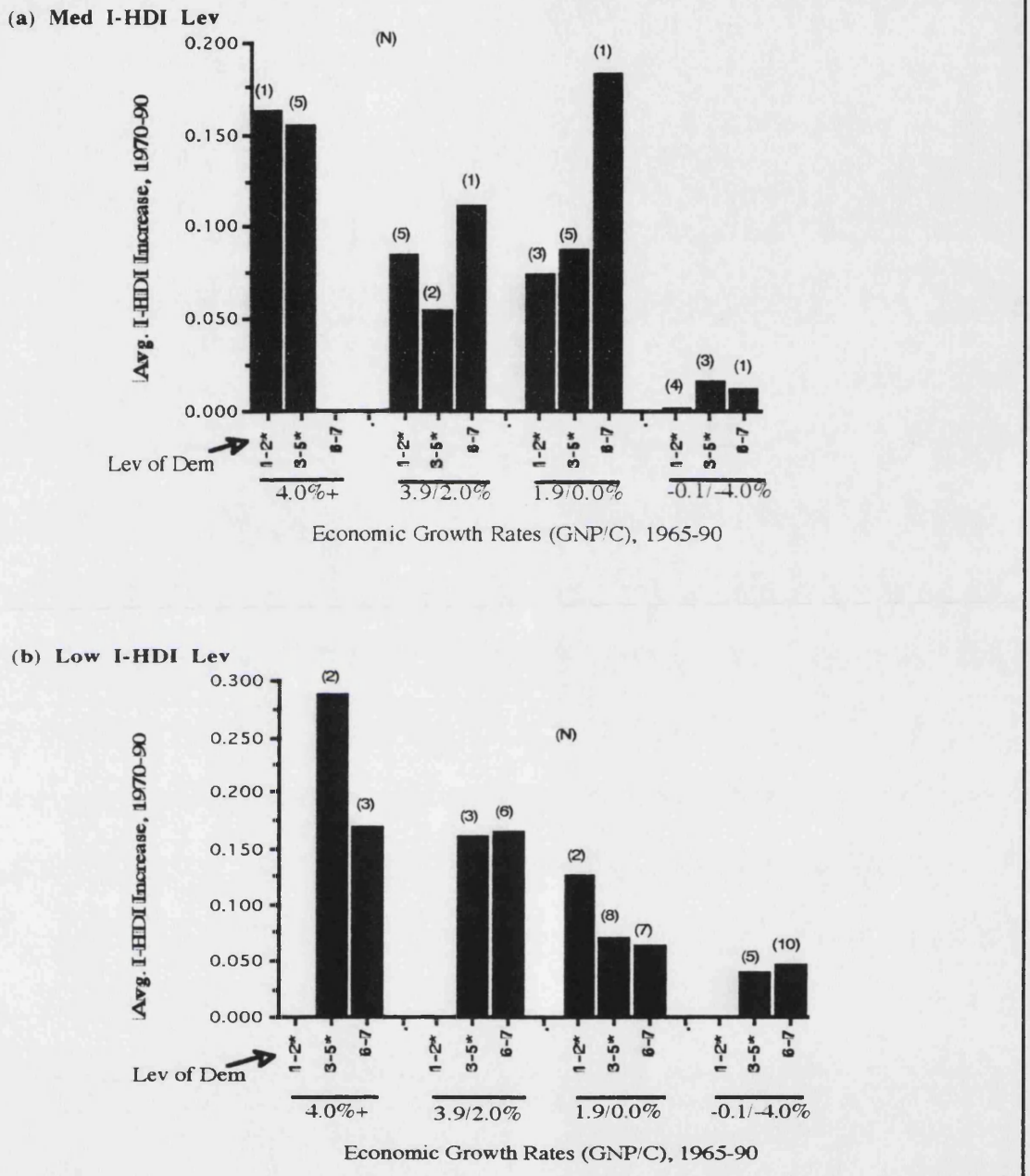
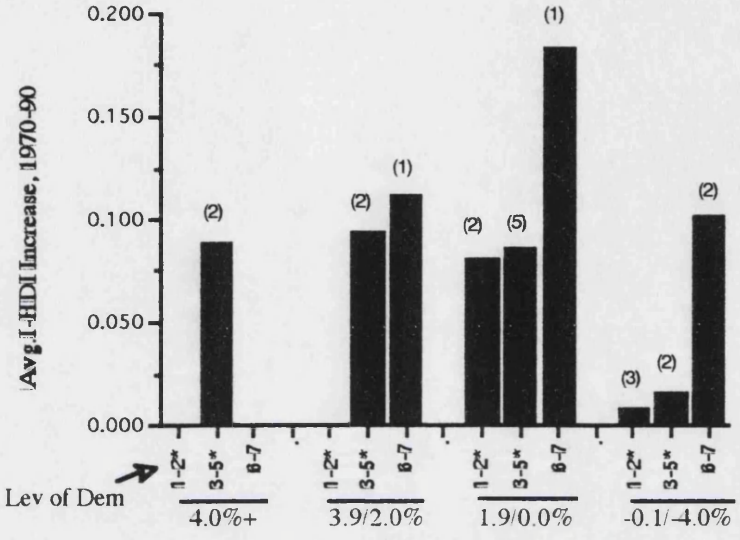


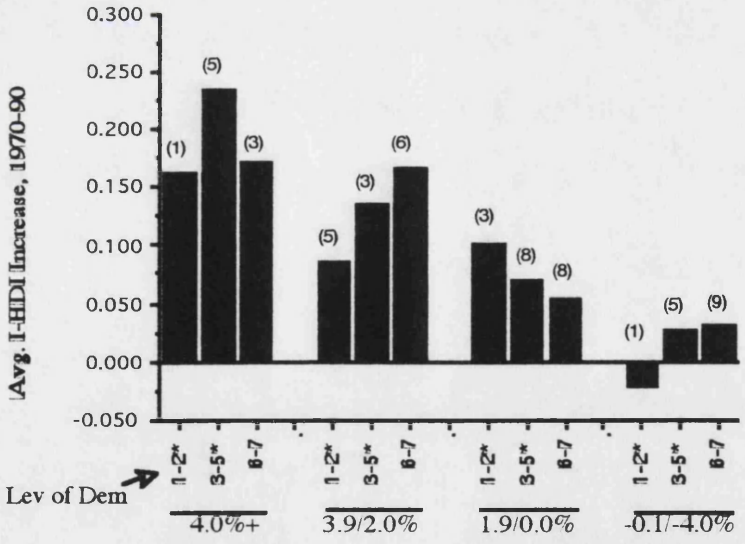
Figure 7.7 (overleaf) follows a similar approach, this time controlling for levels of economic development (developing countries have been divided into the wealthy and poor samples, INC 1&2 and INC 3&4, depending on their INC group in 1970). In the wealthy sample (graph a), no democratic state produced an economic growth rate of either 4.0%+ or 3.9/2.0%. Among countries with economic growth rates of 1.9/0.0%, the two democratic states, Costa Rica and Trinidad and Tobago, had a slightly lower average I-HDI increase (0.081) than the five non-democratic (3-5*) states (0.086); Chile towered over both groups

Fig. 7.7 Economic Growth and Human Development Gains By Level of Democracy, Controlling For Levels of Economic Development (Developing States)

(a) Wealthy (INC 1&2)



(b) Poor (INC 3&4)



with an increase of 0.183. Among countries with negative economic growth rates, the democratic states (Venezuela, Peru and Jamaica) had an average I-HDI increase of only 0.008, compared to 0.015 for the non-democratic (3-5*) states and 0.101 for the non-democratic (6-7) states.

Democratic states were more evenly spread out across the economic growth rate brackets in the poor sample (graph b). Among the countries experiencing rapid growth,

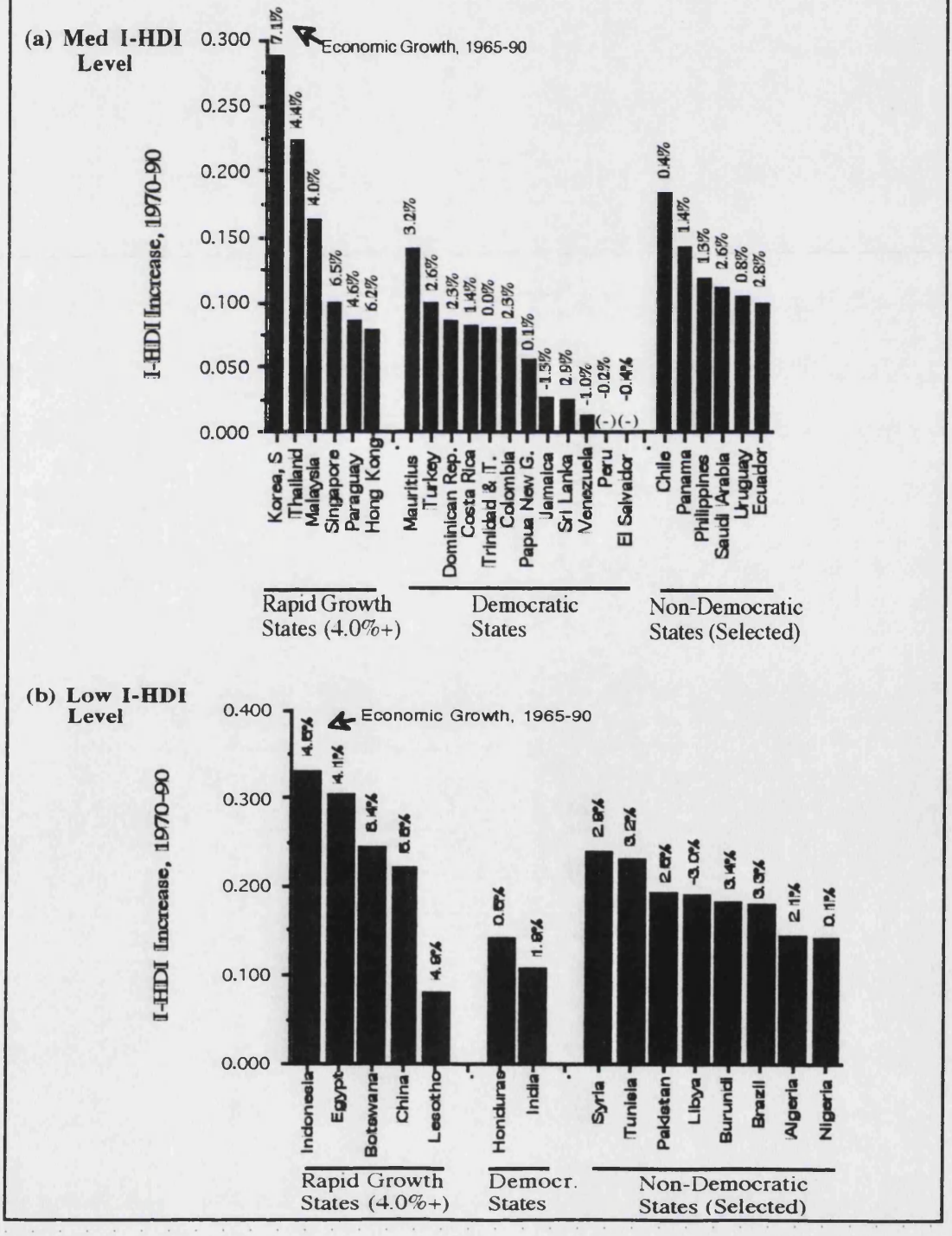
Malaysia's I-HDI increase of 0.163 was only marginally less than the average for the non-democratic (6-7) states (0.169), though considerably less than the average increase for the non-democratic (3-5*) states (0.234). Of the countries with growth rates of 3.9/2.0%, the democratic states produced an average I-HDI increase (0.085) which was almost half the increase for the non-democratic (6-7) states (0.166), and noticeably lower than the increase for the non-democratic (3-5*) states (0.135). But in the next economic growth group (1.9/0.0%), the three democratic states (India, Honduras and Papua New Guinea) displayed a much higher average I-HDI increase (0.102) than both the non-democratic (3-5*) and non-democratic (6-7) states (0.069 and 0.054). The only democratic state in this sample with a negative growth rate, El Salvador, also exhibited a negative I-HDI rate (-0.021), whereas slight increases (0.026 and 0.030) were observed for the non-democratic (3-5*) and non-democratic (6-7) states.

After excluding the single-country cases from the two samples, democratic states did not fare quite as well as non-democratic states with similar rates of economic growth, although the results were far from conclusive. In the wealthy sample, democratic states produced a lower average I-HDI increase than the non-democratic (3-5*) states among the slow growth states (1.9/0.0%) and produced a lower increase than both the non-democratic (3-5*) and non-democratic (6-7) states among the negative growth states (-0.1/-4.0%). The record was mixed in the poor sample: among countries with economic growth of 3.9/2.0%, democratic states produced a lower average I-HDI increase than both non-democratic groups, but produced a better average increase among countries with economic growth rates of 1.9/0.0%.

The level of democracy therefore provides no significant insight into a country's general ability to translate economic growth into human development gains, since the results vary by sample group and economic growth bracket. But, again ignoring the single-country cases, another pattern does in fact emerge: on average, the highest human development gains over the period were made by non-democratic states with strong or rapid economic growth. In Figure 7.6 above, the non-democratic (3-5*) states with economic growth of 4.0%+ produced by far the highest average I-HDI increases at both the Medium and Low I-HDI Levels (0.155 and 0.288). In Figure 7.7, the non-democratic (3-5*) states in the poor sample with growth rates of 4.0% produced by far the highest average increase (0.234), followed by those non-democratic (6-7) states with rapid growth (0.169) and strong growth (0.166). Only the wealthy sample provides an apparent exception which, upon closer inspection, may be explained by two factors: (1) the high average increase produced by the two non-democratic (6-7) states with negative growth conceals an enormous imbalance between the two (0.012 for Kuwait, 0.190 for Libya); and (2) the two non-democratic (3-5*) states with rapid growth (Singapore and Hong Kong) already had very high I-HDI values in 1970, and were thus expected to develop more incrementally.

This observation deserves further scrutiny. The actual degree of variation concealed by these average results may be seen in Figure 7.8, where human development (I-HDI) increases are compared for the rapid growth states (4.0%+), the democratic states, and selected non-democratic states, after controlling for initial levels of human development (the GNP/C rate is also given for each state). Several points are worth making, some of which have already been touched upon.

Fig. 7.8 Comparing Human Development Increases: Rapid Growth States, Democratic States and Selected Non-Democratic States



Many rapid growth states displayed altogether dissimilar human development gains. In the Medium I-HDI sample (graph a), Paraguay's I-HDI increase (0.080) must be judged to be unsatisfactory given its high growth rate of 4.9% (Singapore and Hong Kong produced similar I-HDI increases but began the period with much higher I-HDI values). By contrast, Thailand had virtually the same economic growth rate (4.4%) but its I-HDI increase (0.223) was almost three times as great as Paraguay's. In the Low I-HDI sample (graph b), a wide gulf separated the I-HDI records of Indonesia (0.331) and Lesotho (0.080), although both displayed similar growth rates (4.5% and 4.9%, respectively).

It is also evident that rapid growth states did not always produce higher human development increases than countries with slower rates of economic growth, whether democratic or non-democratic. Despite its rapid growth rate, Paraguay had roughly the same I-HDI increase as the Dominican Republic (0.085), which had a growth rate of 2.3%, and had almost half the increase of Chile (0.183), which had a growth rate of only 0.4%. Among the least developed countries, Lesotho displayed a much lower I-HDI increase (0.080) than India (0.109) and Nigeria (0.141) despite posting a vastly superior economic growth rate (4.9%, compared to 1.9% for India and 0.1% for Nigeria).

Moreover, as a corollary to the point just made, while rapid economic growth certainly helps, it is not a prerequisite for substantial human development gains. Some non-democratic states were able to achieve relatively high I-HDI increases with growth rates below the 4% threshold, most notably Chile (0.4%) and Panama (1.4%) at the Medium I-HDI Level, and Syria (2.9%) and Tunisia (3.2%) at the Low I-HDI Level. Mauritius (3.2%) is the most obvious democratic state to be included among the elite group of performers. It may also be noted that slow growth democracies such as Costa Rica (1.4%) and Trinidad and Tobago (0.0%) were at the same high I-HDI plateau in 1970 as Singapore (6.5%) and Hong Kong (6.2%), and produced quite similar I-HDI increases over the period (0.083 for Costa Rica, 0.080 for Trinidad and Tobago, 0.099 for Singapore, and 0.078 for Hong Kong). However, this combination of good human development performance and slow economic growth was, to use the UNDP's terminology, 'unbalanced'.

Democracy and the 'Links' Between Economic Growth and Human Development Performance

Another useful means of examining how well economic growth is translated into human development progress is provided by the UNDP in the 1996 Human Development Report. It is suggested that countries may be classified according to how strong the 'links' are between economic growth and human development performance:

> When the links are *strong*, (economic growth and human development) contribute to each other. But when the links are *weak* or broken, they can become mutually stifling as the absence of one undermines the other. *Unbalanced* links are the result of rapid human development with little growth or of fast growth with slow human development (UNDP 1996: 66; emphasis added).

Fast growth is defined by the UNDP as a GDP/C rate over 3% ("the rate that would double per capita income in a generation"), and rapid human development is defined as a reduction in 'HDI shortfall' above 40% (the average for the countries included in the UNDP's study) between 1960-92.

The UNDP's criteria have been slightly modified in the analysis to follow. The 3% threshold for economic growth is still retained, although the GNP/C variable is used instead of GDP/C. Likewise, the practice of measuring the reduction in human development 'shortfalls' is accepted, although the I-HDI variable is used instead of the HDI.[6] Given that the periods under review are shorter than the UNDP's three-decade survey, the reduction thresholds have been adjusted to 20% for the 1970-80 and 1980-90 periods, and 30% for the longer 1970-90 period. Therefore, under the new formula to be employed: countries with 'strong links' displayed economic growth rates (GNP/C) of 3% or more and reductions of 30%+ in their 'I-HDI shortfalls' over the 1970-90 period (20%+ over the shorter periods); countries with 'unbalanced links' displayed either strong economic growth (3%+) and weak I-HDI performance (reduction rates below the 20% or 30% thresholds, depending on the period), or weak economic growth (below 3%) and strong I-HDI performance (reduction rates above the 20% or 30% thresholds, depending on the period); countries with 'weak links' displayed weak economic growth (below 3%) and weak I-HDI performance (reduction rates below the 20% or 30% thresholds).

The actual distribution of countries (N) by level of democracy and type of 'link' is given in Table 7.15 below. Irrespective of period, the number of countries with 'weak links', most of which were from sub-Saharan Africa, remained high throughout, and formed the largest single block of states: 46 of 88 (52%) in 1970-80, 55 of 82 (67%) in 1980-90, and 46 of 76 (61%) in 1970-90. In contrast, roughly one-tenth of the developing countries in the shorter periods displayed 'strong links' (9 of 88 or 10% in 1970-80, 10 of 82 or 12% in 1980-90), rising up to one-sixth (13 of 76 or 17%) over the longer 1970-90 period. In both the 1970-80 and 1970-90 periods, most countries with 'unbalanced links' crossed the economic growth threshold but not the human development performance threshold, whereas the reverse was true for the 1980-90 period.

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[6] A country's I-HDI shortfall is the difference between its I-HDI value for a given date and the absolute maximum on the I-HDI scale (1.000). Thus, to calculate a country's I-HDI reduction rate (%) for 1970-90:

I-HDI shortfall reduction rate= ((I-HDI 1990 - I-HDI 1970) / (1 - I-HDI 1970)) X 100

For example, Malaysia had an I-HDI value of 0.595 in 1970 (its 'I-HDI shortfall' in 1970 was 1.000 - 0.595 = 0.405). By 1990 its I-HDI value stood at 0.758, suggesting a reduction of 40% in its I-HDI shortfall since 1970: ((0.758 - 0.595) / (1 - 0.595)) X 100 = 40%

Table 7.15 Distribution of Developing Countries (N) By Level of Democracy and Type of 'Link'

Period	LoD	Strong Links	Unbalanced Links +EcoGr	+I-HDI	Weak Links
1970-80	1-2*	1	9	0	6
	3-5*	3	9	1	7
	6-7	5	12	2	33
1980-90	1-2*	4	3	6	13
	3-5*	3	1	4	16
	6-7	3	1	2	26
1970-90	1-2*	2	2	2	9
	3-5*	7	4	2	19
	6-7	4	5	2	18

Notes. N for each sample= 88 (1970-80), 82 (1980-90), 76 (1970-90)

Of the nine countries with 'strong links' in the 1970-80 period, Malaysia came from the democratic group, Hong Kong, South Korea and Brazil came from the non-democratic (3-5*) group, and Syria, Jordan, Egypt, Ecuador and Panama came from the non-democratic (6-7) group (Table 7.16 overleaf). The ratio of democratic states to all states with 'strong links' (1 of 9, or 11%) was only slightly less than the ratio of democratic states to all developing states in the sample (16 of 88, or 18%). Four of the ten countries with 'strong links' in the 1980-90 period had democratic LoD values (Mauritius, Malaysia, Botswana and, barely, South Korea); the other states with 'strong links' were Hong Kong, Singapore and Thailand from the non-democratic (3-5*) group, and Indonesia, China and Chile from the non-democratic (6-7) group. Again the ratios were largely similar: 40% of countries with 'strong links' were democratic, as were 32% (26 of 82) of all developing countries during the period. There were two democratic states with 'strong links' over the 1970-90 period (Malaysia and Mauritius), compared with seven non-democratic (3-5*) states (Botswana, Hong Kong, South Korea, Brazil, Thailand, Singapore, and Indonesia) and four non-democratic (6-7) states (Egypt, Syria, Tunisia and China). This ratio (2 of 13, or 15%) was similar to the ratio of democratic states to all developing states (15 of 76, or 20%).

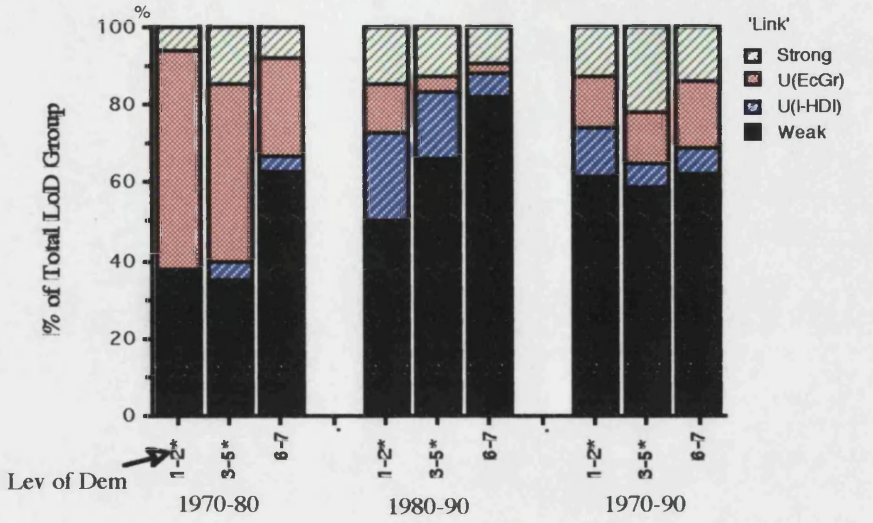
Table 7.16 Developing Countries With 'Strong Links', 1970-90

(a) 1970-80				(b) 1980-90				(c) 1970-90			
Country	LoD 1970/ 1980	Shortf. Red. Rate	GNP/C* 1965/ 1980	Country	LoD 1980/ 1990	Shortf. Red.. Rate	GNP/C 1980/ 1992	Country	LoD 1970/ 1990	Shortf. Red. Rate	GNP/C 1965/ 1990
Jordan	6.5	35%	6%	Korea, S.	2.9	56%	9%	Korea, S.	4.1	66%	7%
Brazil	5.7	25%	6%	Chile	6.2	44%	4%	Thailand	4.4	49%	4%
Egypt	5.8	25%	3%	Thailand	3.4	40%	6%	Botswana	3.0	46%	8%
Syria	6.4	24%	5%	Mauritius	2.0	39%	6%	Indonesia	5.5	45%	5%
Panama	6.7	23%	3%	Botswana	2.4	36%	6%	Egypt	6.0	45%	4%
Ecuador	6.4	22%	5%	Indonesia	6.1	33%	4%	Tunisia	6.3	45%	3%
Malaysia	2.4	22%	5%	China	6.6	28%	8%	Mauritius	2.2	41%	3%
Korea, S.	5.9	22%	7%	Malaysia	2.8	23%	3%	Malaysia	2.6	40%	4%
Hong K.	4.0	21%	6%	Singapore	4.1	22%	5%	Syria	6.4	40%	3%
				Hong K.	4.0	20%	6%	Hong K.	4.0	37%	6%
								China	6.7	37%	6%
								Brazil	4.2	36%	3%
								Singapore	4.5	35%	7%

Notes. *GNP/C rates have been roundedup for all three periods.

To further demonstrate how insupportable any generalizations are, the actual numbers of states with each type of 'link' have been computed as a percentage of the total from each level of democracy (Figure 7.9). By and large, the percentage breakdowns were quite similar for all three LoD groups. Between 6-15% of all developing democracies displayed 'strong links', a range similar to the percentages found for the non-democratic (3-5*) and non-democratic (6-7) states (13-22% and 8-14%, respectively). At the other extreme, a similar percentage of democratic and non-democratic (3-5*) states showed 'weak links' over the two shorter periods (38-50% and 35-66%), and all three LoD groups had indistinguishable percentages over the 1970-90 period (61%, 59% and 62%). Nor does the level of democracy reveal much about the likelihood of producing 'unbalanced links' of either type. Over the entire 1970-90 period, the percentages from each LoD group with 'unbalanced links' in favour of economic growth were 13%, 13% and 17%, and the percentages from each LoD group with 'unbalanced links' in favour of human development were 13%, 6% and 7%. Clearly, there is no strict relationship between the level of democracy and the type of 'link' between economic growth and human development performance.

Fig. 7.9 Distribution of Developing Countries By Level of Democracy and Type of 'Link' (%)



7.4 Identifying the Exceptional Performers: Developmental States, 1970-90

If a general relationship cannot be established, are there any underlying similarities between those individual countries with exceptional developmental records? More specifically, do exceptional performers have anything in common *politically*? Recent attempts to address these questions have focused on the notion of the 'developmental state',[7] whose comparative political dimension has been analyzed most comprehensively by Adrian Leftwich (1990, 1993a, 1993b, 1994, 1995, 1996a, 1996b, 1998).[8] After first summarizing the main tenets in his thesis, it will be shown that the developmental states identified by Leftwich were unquestionably the most exceptional performers over the 1970-90 period.

[7]The concept of the developmental state is, of course, not new. According to Leftwich, its core features may be traced back to the writings of Marx and Weber (Leftwich 1993b: 70). More recently, it was in Chalmers Johnson's landmark study of the Japanese model of development (1982) "that the phrase 'developmental state' made its formal debut and that a serious attempt was made to conceptualise it" (Leftwich 1994: 403). Common to all accounts is the "concept of the state as crucial stimulant and organizer of socio-economic progress" (White 1984: 97).

[8]Leftwich succeeds in bridging theory and practice. No other political analyst, to the best of my knowledge, takes the actual step of assigning *statistical criteria* for identifying developmental states over a given period. His theoretical assumptions are, therefore, empirically verifiable.

The Politics of Developmental States: A Synopsis of Leftwich's Thesis

The principal argument running through Leftwich's writing on politics and development is that: "what matters for development is not the system of government, or regime-type - that is, whether it is democratic or not - but *the type of state"* (Leftwich 1996a: 5; emphasis added). This argument may be broken down into two parts, each of which challenges a key conventional assumption. The first part criticizes the prevailing view in Western policy-making circles, that "'good governance' and democracy are not simply desirable but essential conditions for development in all societies", as being based on ideology, not historical reality (Leftwich 1993a: 605; Leftwich 1994: 363-373). Indeed, as confirmed by the findings in this study, the form of government reveals virtually nothing about developmental potential.

The second part of the argument brings the state back in as the central unit of analysis to challenge the accepted belief, best articulated by the World Bank (recall Chapter 1), that successful development must be market-led, not state-led. Whereas Leftwich believes in the 'primacy of politics' (1993a: 613-614) but acknowledges the importance of an effective market, the World Bank believes in the 'primacy of the market' but (now) acknowledges the importance of an effective state (World Bank 1997: 1-38).[9] At the heart of the issue is the actual role of the state in the development process.

According to Leftwich, countries which have achieved the greatest developmental success over the past few decades have been characterized by a strong, competent, and interventionist state with clearly-defined developmental objectives. To prove this point, Leftwich selects a statistical benchmark of 4% GNP/C growth for the 1965-90 period and identifies eight 'developmental states' which managed to surpass this rapid growth threshold: Botswana, Singapore, South Korea, Thailand, Malaysia, Indonesia, Taiwan and China (1996b: 288). In all cases, state intervention, the exact nature and level of which

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[9]Prior to the mid-1990s, the World Bank held that the role of the state should essentially be limited to three broad, yet extremely important, functions: (1) to create an enabling environment for market forces to flourish; (2) to invest in human capital; and (3) to provide a safety net for society's most vulnerable (World Bank 1983: 47, 56; World Bank 1987a: 58-60; World Bank 1990a: 51; World Bank 1991a: 128). The landmark 1997 World Development Report considered the role of the state in much greater detail, and acknowledged quite explicitly that: "the state is central to economic and social development, not as a direct provider of growth but as a partner, catalyst, and facilitator" (World Bank 1997: 1). The need for an 'effective state' with strong 'institutional capability' became more clearly recognized in this Report (ibid: 29-37), but the state's position was still defined in relation to the market: "the state is essential for putting in place the appropriate institutional foundations for markets. And government's credibility - the predictability of its rules and policies and the consistency with which they are applied - can be as important for attracting private investment as the content of those rules and policies" (ibid: 4). Most significantly, the World Bank now argued against: "the folly of thinking that development strategy is a matter of choosing between the state and the market...(since) the two are inextricably linked. Countries need markets to grow, but they need capable state institutions to grow markets" (ibid: 38). The World Bank is not, therefore, strictly against state intervention per se, provided that such intervention is limited to correcting "market failure" and "improving equity" (ibid: 26); within these parameters there is considerable room for state action: depending on the need, this intervention may assume 'minimal', 'intermediate', or 'activist' functions (ibid: 27). But by the World Bank's own admission, does the seminal role of the state in creating the conditions for growth, coupled with the wide scope for state action to ensure that growth does occur, not in fact *confirm* Leftwich's argument regarding the 'primacy of politics'?

varied, involved considerably more than simply creating favourable market conditions: the state established developmental targets and ensured that these targets were met. The key, in other words, was "not market demand but state command" (Shin 1998: 4); or, to paraphrase the title of an influential study, the state's ability to effectively "govern the market" (Wade 1990).[10]

From the experiences of these highly successful cases, a new paradigm emerges in which the interventionist state "coordinates socioeconomic resources toward growth, sets performance goals for high-priority sectors, and controls opposition to growth" (Cho and Kim 1998: 129). Leftwich describes the dynamics involved:

> (developmental states) are those states whose internal politics and external relations have served to concentrate sufficient power, authority, autonomy, competence and capacity at the centre to shape, pursue and encourage the achievement of explicit developmental objectives, whether by establishing and promoting the conditions of economic growth, or by organizing it directly, or a varying combination of both (Leftwich 1996b: 284).

Six features are therefore required to underpin the political basis of developmental states:

> (i) a dedicated developmental elite; (ii) relative autonomy for the state apparatus; (iii) a competent and insulated economic bureaucracy; (iv) a weak and subordinated civil society; (v) the capacity to manage effectively local and foreign economic interests; and (vi) a varying balance of repression, legitimacy, and performance which appears to succeed by offering a trade-off between such repression as may exist and the delivery of regular improvements in material circumstances (Leftwich 1998: 62-63).

The most recent of several such formulations (Leftwich 1994: 378-380; Leftwich 1996b: 285-289), this model is broadly consistent with the findings of other analysts (White 1984; Sorensen 1993a; Shin 1998).[11] While not embodying these features to the same extent,[12]

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[10]The World Bank acknowledges the key role played by the state in the case of the East Asian NICs (and Japan), but maintains that this success was attributable to the market's ability to 'discipline' and 'check' the scope of state intervention, however well-planned and executed (World Bank 1987a: 39). Furthermore, the very nature of the interventions are described in administrative terms: the 1987 World Development Report recognized that "industrial targeting" was successfully implemented "by strong and capable governments" (World Bank 1987a: 71); and the 1997 Report claimed that these states, possessing "strong institutional capability", pursued "an activist industrial policy" which employed "a variety of mechanisms for *market enhancement*" (World Bank 1997: 6; emphasis added). Nonetheless, despite the World Bank's interpretation of events, the fact remains that without state support and guidance "sound policies for promoting economic growth will not be implemented or even formulated in the first place" (Quah 1994: 15).

[11]Shin in particular (1998: 7-9) observes the following characteristics for the developmental states of East Asia: (1) "autocratic power, compulsion, and oppression"; (2) "centralized economic policy-making organizations"; (3) state control over the economy (especially investment flows); (4) export-oriented industrialization strategies; (5) the creation of "economic agencies and big capitalists to carry out economic planning in the private sector"; and (6) a "good business climate" (through, for example, "oppressive labour policies").

[12]Leftwich himself recognizes that the cases often "vary with respect to all the major (political) factors" (1995: 420). For example, Thailand and Indonesia do not meet the criterion of competent, corruption-free governance as well as Botswana (ibid: 407), just as China "provides the weakest example of an effective economic bureaucracy" (ibid: 414). By providing well-argued justifications for the inclusion of each political feature (1994: 377-381; 1995: 405-420), Leftwich lays the basis for a *general* analytical framework which allows for some degree of variation between the cases.

developmental states all appear to epitomize the principles behind political development theory's "constant programme: autonomy and elite dominance" (Cammack 1994a: 370; recall Chapter 2); which, in turn, may be traced even further back to "Marx's autonomous state and Weber's legal-rational authority" (Leftwich 1993b: 70).

Although this model of the developmental state does not contain any features traditionally assigned to a liberal democracy, it does not preclude the emergence of a democratic developmental state. The implication here is two-fold: that a liberal democracy cannot be sufficiently 'developmental'; and that a democratic developmental state is unlikely to exhibit liberal democratic features (Robinson and White 1998: 6). It is necessary to make this distinction because of what Leftwich calls the "structural contradiction between the conservative requirements of stable democratic survival and the transformative logic of economic growth" (Leftwich 1998: 56-57). White concurs: "any democratic developmental state will need sufficient political authority and administrative capacity to maintain public order by managing the social and political conflicts arising from structural divisions in society and from the tensions inherent in a successful growth process" (White 1998: 29). Given these requirements, it is not surprising that a democratic developmental state:

> may be a rare bird on the developmental scene in the future, as it has been in the past. This is partly because it is defined in terms which are potentially contradictory and difficult to achieve: autonomy *and* accountability; growth *and* redistribution; consensus *and* inclusiveness (White 1998: 44).

Hence, the only way to counter the argument that there is a fundamental incompatibility between democracy and superior developmental performance is to broaden the definition of democracy beyond its strictly liberal democratic parameters. By doing so, Leftwich is able to argue that *formally* democratic states such as Singapore, Malaysia and Botswana should be viewed as examples of 'democratic developmental states' because of their comparatively better, though not completely satisfactory, records on human rights and civil liberties.[13] There is no question that these states, which he refers to more accurately as 'authoritarian democracies' or 'dominant-party' democracies (Leftwich 1996b: 290-291), are characterized by de facto one-party/coalition rule: the People's Action Party (PAP) has governed Singapore since 1959; the ruling National Front coalition in Malaysia has been dominated by the United Malay National Organization (UMNO) since 1969; and the Botswana Democratic Party (BDP) has been in power since independence in 1968. Indeed, Leftwich claims that this condition of one-party/coalition rule may be *essential* to the success of the 'democratic sub-type':

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[13]This argument is of course relative. On the seven-point scale of civil liberties (with 1.0 being the best score) the period CL values (1970-90) were 4.9 for Singapore, 4.0 for Malaysia, and 3.0 for Botswana. Objectively speaking, therefore, Singapore and Malaysia fell into the bottom half of the CL scale. Furthermore, compared to four *non-democratic* developmental states, Singapore actually fared worse than Thailand (3.9), about the same as South Korea (5.1) and Indonesia (5.2), but better than China (6.4).

> ...without this central condition of long-term, dominant-party rule...(the state's) developmental elites would have been dividedor paralysed; relative state autonomy would have been impossible and the badgering demands of special interests would have come to predominate; bureaucratic continuity and capacity would have been compromised; and either local or foreign economic interests, or both, would soon have become entrenched in ways that would be unlikely to serve national developmental goals (1996b: 291).

Speaking as Deputy Prime Minister of Singapore in 1985, Goh Chok Tong provided a variation of this theme by stressing the importance of 'stability' (control) over 'politics' (pluralism):

> A stable government is a prerequisite for economic development. Without it, private investors will not be able to make long-term investment decisions....A stable government alone is not enough for economic development to take place. It must also be development-oriented....Economic development can succeed only if the government is totally committed to it. *Politics must not be allowed to interfere in the development process.* The government would have to make policy decisions on the basis of economic decisions rather than on political ideology; otherwise the results will be disastrous (quoted in Quah 1998: 16; emphasis added).

In other words, political pluralism has no place in 'rational' development planning. Hence, despite its overtly pluralistic nature, Botswana is better described as an 'administrative state' (like Singapore and, to a lesser extent, Malaysia):

> Resources are allocated by commands issued by administrative elites, and there is no control by any other social group over decision-making. Authority...flows downward from the rulers to the ruled; the administrative elites have complete control over the decision-making process (Gunderson in Picard 1987: 13).

Thus the apparent dilemma: in order to successfully pursue developmental objectives, states with formally democratic trappings need to suppress formally democratic procedures. Successful development, led and managed by the state,[14] requires that 'competitive'

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[14]Successful state-led development requires a total commitment on the part of political elites, who tend to view themselves as 'modernizers', to the development project (Leftwich 1996b: 285). The description of Malaysia's political elite as "rational, pragmatic, essentially conservative" (Girling 1996: 46) applies equally as well to Singapore and Botswana. The PAP leadership in Singapore formulated its 'hegemonic ideology' around the twin concepts of national survival and pragmatism: without economic development, the very survival of the country would be placed in jeopardy; and without pragmatic (i.e. PAP) leadership and policies, economic development would be impossible (Huat 1994: 123). Under its New Economic Policy, the UMNO-dominated National Front coalition in Malaysia linked the necessity for development with the loftier goal of 'communal harmony': in addition to increasing the overall prosperity of the country as a whole, it was also believed that economic growth would serve the purpose of partially redressing the socio-economic imbalance between the affluent Chinese and the poorer Malay (and Indian) communities (Girling 1996: 48). Though lacking "any overriding ideology" (Picard 1987: 219) as well-articulated as the PAP and UMNO platforms, the BDP in Botswana is led by "a cohesive group of elites who see themselves as modernizing agents" committed to a "state-managed, top-down strategy of economic growth" (ibid: 271).

structures and mechanisms be replaced by 'administrative' ones,[15] backed by the threat of coercion if and where necessary.[16]

But how well does this interpretation apply to the curious case of Mauritius, an apparently successful liberal democracy? Although it fell short (3.2%) of his previously established 4% GNP/C threshold for the 1965-90 period, the reason for its exclusion in his earlier articles (Leftwich 1996b: 283), Leftwich recently (1998) added Mauritius to his list of 'developmental democratic states' (to use his new preferred term). Its excellent record, which fully justifies its status as a developmental state (as subsequent sections will show), was achieved in a political environment characterized by: "a seamless web of consolidation and fragmentation among political parties and an endless parade of alliances and fissures between members of the political class" (Bowman 1991: 68). Nonetheless, there are perhaps two main reasons why Mauritius may not be so different after all: (1) the groundwork for the eventual success which Mauritius enjoyed was actually laid during the

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[15]Displaying an obsession with economic development (Quah 1994: 4-14), the PAP has systematically and effectively "depoliticized the citizenry" and transformed Singapore into an "administrative state" (Chee in Girling 1996: 51). Truly competitive politics has not existed in Singapore since the 1955-65 period (Huat 1994: 121), a fact attributable to both the PAP's complete control of the state machinery and to the opposition's decision to boycott parliament throughout the 1966-1981 period. Economic policies are formulated and implemented by the bureaucracy with virtually no public input. Since the watershed election of 1984, in which the PAP lost an 'alarming' total of two seats (more importantly, its share of the vote fell from 76% to 63%), the PAP has taken steps to at least appear to consult the public (primarily about social issues) (Quah 1994: 23; Huat 1994: 126-127). To a slightly lesser extent than Singapore, Malaysia has also assumed some of the characteristics of an administrative state. The cornerstone of development planning, the New Economic Policy, has "created enormous concentration of power in the hands of government" and allowed for a "marriage between business and politics" (Mahmood 1994: 67). Through its strong hold over the Malaysian Civil Service and other branches of the state bureaucracy (Girling 1996: 47), the NF coalition ensures that economic strategies can be implemented with little or no obstruction. Political opposition to the NF coalition has been effectively contained and reduced to almost irrelevance (Mahmood 1994: 68). In the case of Botswana, Picard argues (1987: 270-271) that: "the nature of the state is bureaucratic rather than political, with an administrative hierarchy that is authoritarian in its approach to the policy process". In fact, "the day-to-day running of the country (is left) to the administrative cadre of the civil service" (ibid: 167). The government's favoured strategy for dealing with key opposition politicians is to 'co-opt' them into the BDP's fold (ibid: 168).

[16]Singapore's authoritarian tendencies have been well documented: armed with 'draconian' legislation such as the Internal Security Act, the government has ensured that political opponents could be effectively muzzled, trade unions controlled, and press freedom curtailed (Quah 1994: 19; Girling 1996: 51-52; Bhardwaj and Vijayakrishnan 1998: 91-93). So all-pervasive has been the power and influence of the state that one scholar observes that: "the ubiquitous social controls, constant exhortations and slogans, the extensive cadre network and the use of trade unions as transmission belts (from the centre to the masses) are all more reminiscent of conditions in communist countries than in the West....(although, in Singapore's case, they must be) greatly modified by the need to reconcile foreign investment and multinational enterprise with social welfare and state capitalism" (Girling 1996: 52). Malaysia's record is not much better: detention without trial is permitted; the independence of the judiciary has been curtailed; and the media "has been reduced to a mouthpiece of the government" (Mahmood 1994: 72-73). The NF coalition's domination of the state economic enterprises, coupled with its 'authoritarian' powers granted by legislation (the Internal Security Act, the Sedition Act, the Industrial Coordination Act, etc), ensured that "the state has (extended) its control into every corner of Malaysian society" (ibid: 71-73). By comparison, Botswana is a more tolerant and open society; among other things, the BDP allows "reasonable opposition access to the media" (Picard 1987: 172). The BDP prefers to exercise a more subtle form of socio-political control in the largely rural areas of the country: through its influence over district administrations and district commissioners, which are treated as extensions of the national bureaucracy, the BDP is able to mobilize electoral support, ensure the acceptance and implementation of its policies, and monitor opposition activities (ibid: 148).

country's brief period of Emergency Rule (1972-1975);[17] and (2) beneath the overtly pluralistic character of Mauritian politics emerged a fairly unified elite consensus about development strategy, so that while the composition of the ruling coalitions changed with some degree of frequency following the period of Emergency Rule, the overall development plan stayed on course (Mannick 1989: 95; Bowman 1991: 101; Leftwich 1998: 68).[18] With respect to the second (and arguably less contentious) point, the absence of any real choice rendered the 'free and fair' elections since 1982 largely meaningless from a developmental perspective, prompting one worried political observer to lament that:

> there is very little to choose between the various parties. Consensus politics rules the day. With only minor differences, all parties agree that the momentum of development should continue...The danger here is that politics becomes opportunistic - a game to get into government - rather than a debate over policy issues. Real problems might be forgotten while politicians struggle for positions in the decision-making process (Mannick 1989: 95).

It is therefore debatable whether the people of Mauritius truly had any more substantive input into the developmental process than did the people of Singapore, Botswana, or Malaysia.

The elite consensus on development strategy allows Leftwich to more accurately classify Mauritius as a 'coalitional developmental democratic state', a label also given to Malaysia,[19] as opposed to a 'dominant-party developmental democratic state', a label

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[17]With the suspension of democratic politics, necessitated by the need to restore stability following a series of politically-inspired strikes which had largely paralyzed the country, Mauritius experienced its first economic boom. The country's long-term development strategy was formulated during this period based on the NIC-inspired model of export-led growth (Bowman 1991: 73). It is debatable whether the main vehicle for this proposed growth, the Export Processing Zone (EPZ), could have been established under more democratic conditions. Together with the Industrial Relations Act, which controlled the growth of trade unions, the Public Order Act ensured that any opposition to the EPZ could be effectively suppressed. For example, the very fact that workers in the newly-established EPZ were not permitted to unionize provided sufficient grounds for potentially disruptive industrial action on a wide scale, likely to be supported by the (then) militant socialist party (MMM). There is perhaps a parallel here to Singapore's case, where the complete absence of political opposition in parliament (1966-73) enabled the PAP to drop its previous policy of import substitution and adopt a policy of export-substitution "without any difficulty" (Quah 1994: 10).

[18]Prior to 1982, the main political parties representing this elite consensus on development (mainly the Labour Party and the MSM) essentially formed a tactical alliance to exclude the radical socialist party, the Mouvement Militant Mauricien (MMM), from gaining power. In the mid-1970s, the MMM's electoral platform included a call for "the rejection of capitalism and the adoption of self-managed socialism" (Bowman 1991: 75). Ironically, perhaps the best illustration of the country's 'elite consensus' emerged after the MMM actually came into power during the 1982-3 period. Elected on the wave of popular dissatisfaction following several years of economic stagnation and unrest, it was believed that the MMM would alter or altogether replace the long-established development strategies. However, once in office, pragmatism prevailed over ideology and the MMM came to represent a "continuity of leadership" (ibid: 83-84): the MMM-led government accepted the need to continue with the structural adjustment policies recommended by the IMF in order to get the economy back on track, despite pressure from some factions of the MMM and the party's grass-roots supporters to resist such 'harsh' medicine. History has shown that this decision to essentially *ignore* the electorate served the country well: economic growth accelerated shortly thereafter.

[19]The very nature of their societies - "characterized predominantly by sharp and primary vertical cleavages in ethnicity, culture, (and) religion" (Leftwich 1998: 67) - has obliged Malaysia and Mauritius to accept this 'coalitional' form of government in order to be successful developmentally. This should not, however, obscure some obvious differences between the two cases. Essentially the same coalition, dominated by the United Malay National Organization (UMNO), has governed Malaysia uninterruptedly over the past few

reserved for Botswana and Singapore (1998: 63-70). Common to both sub-types are "political elites and state structures with the determination and capacity to preside over economic growth and welfare" (ibid: 52). This definition distinguishes these states from those found in either of the two *non-developmental* democratic groups: 'class-compromise' (Venezuela, post-apartheid South Africa) and 'party-alternation' (Costa Rica, Jamaica) (ibid: 70-77). After subjecting non-democratic states to the same performance-defined criteria, Leftwich establishes a simple typology listing his preferences (1996b: 282):

1. *Developmental Democratic States* (Botswana, Malaysia, Singapore, Mauritius)
2. *Developmental Non-Democratic States* (South Korea, Indonesia, China, Thailand)
3. *Non-Developmental Democratic States* (Jamaica, India, Gambia, Venezuela)
4. *Non-Developmental Non-Democratic States* (Haiti, most sub-Saharan African states)

One would surely agree that developmental democratic states are preferable to both developmental non-democratic states and to non-developmental democratic states; because of their superior records, developmental non-democratic states are, in turn, preferable to non-developmental democratic states (which are preferable to the worst type of all, the non-developmental non-democratic state).

Why Developmental States Are Exceptional: The Evidence, 1970-90

Having outlined the politics of developmental states, it will now be demonstrated precisely why such states are exceptional *developmentally*. The basic theoretical assumption is that developmental states are most likely to promote the twin objectives of "growth *and* welfare" (Sorensen 1993a: 76). Leftwich certainly supports this premise (1998: 52), but his focus is primarily on the former aspect, a point underlined by his benchmark of 4% GNP/C growth. A similar benchmark for assessing human development progress is not given, although he does stress how well developmental states score on the UNDP's Human Development Index (1994: 380; 1996b: 289).

By analyzing the human development dimension more comprehensively, this section will show that developmental states are exceptional not simply because of their success in fostering rapid economic growth, but because of their unparalleled ability to *combine*

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decades, a point which underlines claims that Malaysia is a de facto one-party (or 'one-coalition') state. On the other hand, Mauritius has been governed by a series of coalitions, the composition of which has rarely been the same in successive terms; moreover, the principal political party around which the governing coalitions were built during the first decade after independence, the Labour Party, had become largely extinct by the early 1980s (during the 1982 election, for instance, the Labour Party failed to win a single seat). Externally, Mauritius did resemble the continuity shown by Malaysia in one respect: from 1968 to 1990, only two individuals held the post of Prime Minister, Seewoosagur Rangaloom (to 1982) and Aneerod Jugnauth (after 1982); Mahathir Mohamad has held this post in Malaysia since 1981.

sustained rapid growth with superior human development gains; that is, to establish the 'virtuous cycle' advocated by the UNDP. The nine cases under review include those seven originally identified above by Leftwich as having surpassed his 4% GNP/C threshold over the 1965-90 period - Botswana, South Korea, Singapore, China, Indonesia, Thailand and Malaysia - plus two worthy new additions to his list, Mauritius and Hong Kong.[20]

How should developmental success be defined? Two approaches have been considered thus far. Leftwich accepts rapid economic growth as his sole selection criterion and assumes that human development progress will naturally follow. On the other hand, the UNDP's method of assessing 'strong links' adds human development progress as an explicit condition to strong (but not necessarily rapid) growth. The resulting lists of applicable cases overlap to a considerable degree (Table 7.17).

Table 7.17 Assessing Developmental Success: Comparing the Approaches of Leftwich and the UNDP

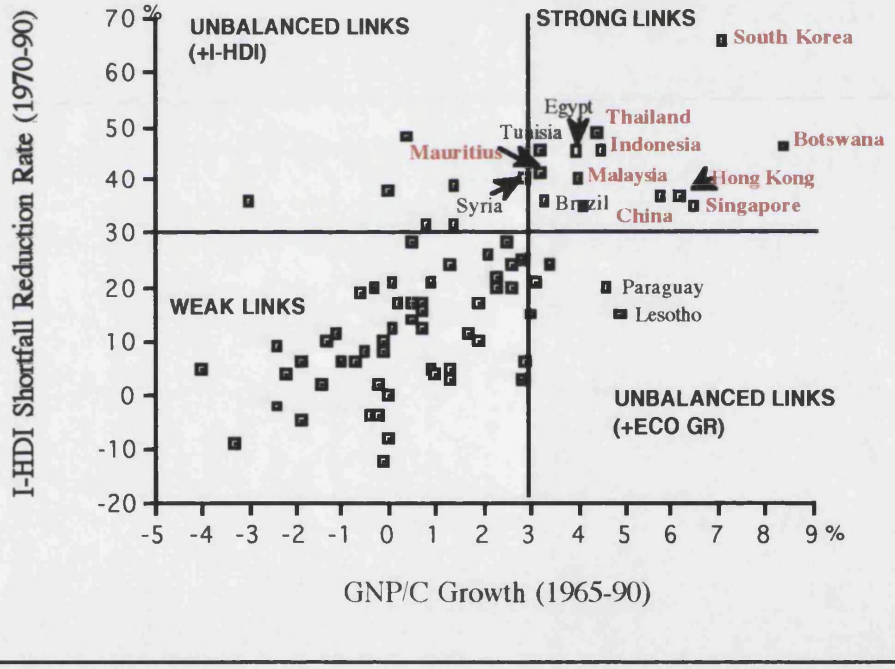
(a) Leftwich's Approach: Rapid Growth States (4%+)		(b) The UNDP's Approach: States with 'Strong Links'		
Country	GNP/C 1965/90	Country	GNP/C 1965/90	Shortf. Red. Rate (I-HDI)
Botswana	8%	Botswana	8%	46%
Korea, S.	7%	Korea, S.	7%	66%
Singapore	7%	Singapore	7%	35%
China	6%	China	6%	37%
Indonesia	5%	Indonesia	5%	45%
Thailand	4%	Thailand	4%	49%
Malaysia	4%	Malaysia	4%	40%
Hong Kong*	6%	Hong Kong	6%	37%
Egypt*	4%	Egypt	4%	45%
Lesotho*	5%	Syria	3%	40%
Paraguay*	5%	Tunisia	3%	45%
		Mauritius	3%	41%
		Brazil	3%	36%

Notes: 1. *Case meets Leftwich's statistical benchmark but is not included in his list of developmental states.
2. GNP/C figures are rounded.
3. 'Strong Links' defined as 3%+ GNP/C growth (1965-90) and I-HDI shortfall reduction of 30%+ (1970-90)

[20]Hong Kong easily surpasses Leftwich's threshold (6.2%) but Mauritius falls just shy (3.2%). Given how often Hong Kong is featured in comparative studies on the East Asian economic miracle (Wade 1990; Kim 1998), and owing to its remarkable achievements over the 1970-90 period in terms of both rapid economic growth and human development, it is difficult to ignore its claim to be a developmental state, despite its colonial status (the reason for its omission from Leftwich's original sample). Likewise, although omitted from Leftwich's original sample (being 0.8% short of the 4% GNP/C threshold), Mauritius also produced a very admirable developmental record over the period, prompting Leftwich (1998) to recently call Mauritius a 'democratic developmental state'. The inclusion of both Hong Kong and Mauritius is therefore entirely justifiable on developmental grounds: as will be demonstrated, their records were largely indistinguishable from those in Leftwich's original set of developmental states. Taiwan does not appear in the list because of its incomplete human development data.

Eleven states surpassed Leftwich's 4% threshold for the period, including eight of the nine developmental states (save for Mauritius), whereas thirteen states satisfied the UNDP's criteria,[21] including all nine developmental states. Careful analysis of the two samples shows that the UNDP's method addresses a two-fold dilemma exposed by the strict application of Leftwich's 4% threshold: (1) not all rapid growth states produce good human development performance (Lesotho and Paraguay);[22] and (2) good human development performance may be achieved in the absence of rapid economic growth (Syria, Tunisia, Mauritius and Brazil). This is particularly well illustrated in Figure 7.10 (developmental states appear in red; the sample includes all developing states, N=76).

Fig. 7.10 Developmental States and Other States with 'Strong Links' In Comparative Perspective, 1970-90



[21]The statistical definition of 'strong links', if altered, would produce different lists. For instance, if Leftwich's 4% growth threshold replaces the 3% threshold in the UNDP's framework, but the human development threshold remains at 30% of the I-HDI shortfall reduction rate, the list is shortened to nine countries: Leftwich's seven developmental states plus Hong Kong and Egypt. However, if Leftwich's 4% rapid growth threshold replaces the 3% threshold *and* the human development performance threshold is raised to 40% of the I-HDI shortfall reduction rate, only six countries would appear in the new list: South Korea, Thailand, Botswana, Egypt, Indonesia and Malaysia.

[22]As demonstrated throughout this chapter, there are cases where rapid economic growth does not in fact produce satisfactory human development performance; in the UNDP's parlance, some countries produce 'unbalanced' links in favour of economic growth (see also Figures 7.2, 7.8, 7.9 and Tables 7.2 and 7.15). Lesotho and Paraguay both surpassed Leftwich's 4% threshold (with GNP/C rates of around 5% between 1965-90) and yet their respective I-HDI increases over the period were very modest (0.080 and 0.086); these increases were even below the average increase (0.090) produced by the 76 developing countries in the general sample. While such examples are relatively rare, they nonetheless illustrate the difficulty of classifying such states as sufficiently 'developmental'. Sorensen refers to such cases as 'authoritarian growth regimes' (1993a: 77).

Whereas both approaches confirm the excellent records of developmental states, neither goes as far as explaining why these records are *unique:* if Leftwich's criterion is accepted, Egypt, Paraguay and Lesotho also deserve acclaim (but Mauritius does not); if the UNDP's criteria are accepted, then Egypt, Syria, Tunisia and Brazil also deserve honorable mention. Given their 'unbalanced links', Paraguay and Lesotho may be dropped from further consideration. But what about the four remaining cases?

Evaluated solely in terms of overall human development progress, Egypt, Tunisia, Syria and Brazil performed largely on par with the nine developmental states. Table 7.18 demonstrates this point by showing how the shortfall reduction rates (HDI, ISC and I-HDI) of the thirteen states compared against four threshold standards: the average for all developing states (D); the average for all countries starting from the same take-off point or index level (L); the average for all countries starting from the same level of economic development (E); and the average for all countries from the same regional group (R).

Table 7.18 Evaluating the Human Development Records of Developmental States and Other States With 'Strong Links' Against Four Threshold Standards, 1970-90

State	HDI Shortf Reduct. %	D	L	E	R	ISC Shortf. Reduct. %	D	L	E	R	I-HDI Shortf Reduct. %	D	L	E	R
Botswana	54	+	+	+	+	29	+	+	+	+	46	+	+	+	+
Korea, S.	70	+	+	+	+	60	+	+	+	+	66	+	+	+	+
Singapore	48	+	+	+	+	18	+	+	+	+	35	+	+	+	+
China	43	+	+	+	+	30	+	+	+	+	37	+	+	+	+
Indonesia	40	+	+	+	+	50	+	+	+	+	45	+	+	+	+
Thailand	62	+	+	+	+	30	+	+	+	+	49	+	+	+	+
Malaysia	61	+	+	+	+	1	+	+	-	-	40	+	+	+	+
Hong Kong	52	+	+	+	+	12	+	+	+	+	37	+	+	+	+
Mauritius	53	+	+	+	+	13	+	+	+	+	41	+	+	+	+
Egypt	39	+	+	+	-	52	+	+	+	+	45	+	+	+	+
Tunisia	53	+	+	+	+	30	+	+	+	+	45	+	+	+	+
Syria	53	+	+	+	+	28	+	+	+	+	40	+	+	+	+
Brazil	51	+	+	+	+	22	+	+	+	+	36	+	+	+	+

Notes. 1. The avg. shortfall reduction rates for all developing states were: 28%(HDI), 1%(ISC), 18%(I-HDI)
2. The avg. shortfall reduction rates for the index levels (Medium, 0.799/0.500; Low, 0.499/0.000) were: 42% (M) and 23% (L) for the HDI; 0% (M) and 7% (L) for the ISC; 22% (M) and 14% (L) for the I-HDI.
3. The avg. shortfall reduction rates for the levels of economic development (INC 2, INC 3, INC 4) were: 36%, 34% and 16% for the HDI; 3%, 3% and 0% for the ISC; 22%, 22% and 10% for the I-HDI.
4. The avg. shortfall reduction rates for the regions (ASI, LAT, MID, AFR) were: 34%, 36%, 43% and 15% for the HDI; 12%, -4%, 8% and 2% for the ISC; 25%, 20%, 29% and 9% for the I-HDI.
5. (+) above or equal to threshold average; (-) below threshold average.

Eleven of the thirteen cases achieved the remarkable feat of surpassing every threshold average for every index; only Malaysia (due to its largely unchanged ISC values

over the period) and Egypt (due to its below average HDI value against the regional threshold) failed to do so. All thirteen states displayed shortfall reduction rates (HDI, ISC and I-HDI) above both the developing averages and the averages for countries beginning from similar index levels. All thirteen states produced better HDI and I-HDI shortfall reduction rates than the averages for countries starting from similar levels of economic development, and only Malaysia failed to accomplish this feat for the ISC. All thirteen states exceeded the average regional I-HDI shortfall reduction rates, all but Egypt exceeded the average HDI regional rates, and all but Malaysia exceeded the average regional ISC rates.

The actual reduction rates in the table also fail to reveal any noteworthy differences between the two samples. Each of the four other cases with 'strong links' compared favourably against the developmental states. For example, Egypt's HDI reduction rate (39%) was similar to Indonesia's (40%), its ISC reduction rate (52%) was better than all but South Korea's (60%), and its I-HDI reduction rate was similar to the rates for Botswana (46%) and Indonesia (45%). Analyzing the reduction rates in terms of ranks shows that: Egypt is 13th (or last) for the HDI, 2nd for the ISC and 4th (tied) for the I-HDI; Tunisia is 5th (tied) for the HDI, fourth (tied) for the ISC, and 4th (tied) for the I-HDI; Syria is 5th (tied) for the HDI, 8th for the ISC, and 8th (tied) for the I-HDI; and Brazil is 9th for the HDI, 9th for the ISC, and 12th for the I-HDI. These four cases were, in other words, interspersed among the developmental states.

Since the two samples cannot easily be differentiated by human development performance alone, one must return to the question of economic growth. Not only did the developmental states produce higher growth rates over the 1965-90 period but, more tellingly, these rates were consistently high throughout the period. It is this condition of *sustainability* which the four other cases - and the two earlier cases of Lesotho and Paraguay - failed to meet (Figure 7.11).

All nine developmental states either surpassed, or just barely failed to surpass, the 4% rapid growth threshold over both shorter periods; the partial exception being Malaysia, which nonetheless produced fairly strong growth (2.9%) over the second period.[23] In sharp contrast, the four cases with 'strong links' displayed highly inconsistent growth from the first period (1965-80) to the second (1980-91): 2.8% and 1.9% for Egypt; 4.7% and 1.1% for Tunisia; 5.1% and -1.4% for Syria; and 6.3% and 0.5% for Brazil. These states - together with Lesotho (6.8% and -0.5%) and Paraguay (4.1% and -0.7%) - were clearly unable to sustain strong growth over the longer term.[24]

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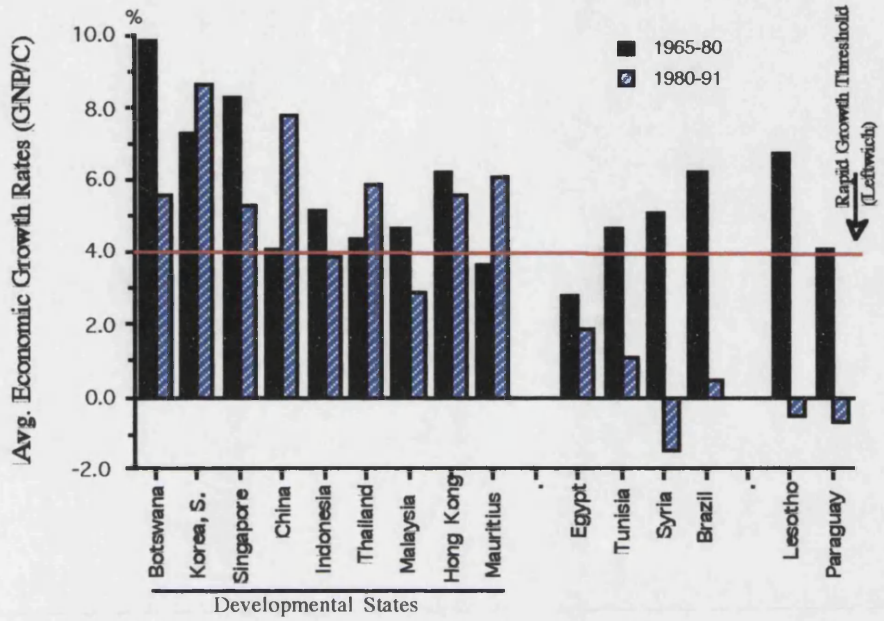
[23]The actual rates (1965-80 and 1980-91) for the developmental states were: 9.9% and 5.6% for Botswana; 7.3% and 8.7% for South Korea; 8.3% and 5.3% for Singapore; 4.1% and 7.8% for China; 5.2% and 3.9% for Indonesia; 4.4% and 5.9% for Thailand; 4.7% and 2.9% for Malaysia; 6.2% and 5.6% for Hong Kong; and 3.7% and 6.1% for Mauritius. (Source: World Bank data in UNDP 1994.)

[24]Recalling that the MID region as a whole made considerable human development gains during the period (section 5.4 in Chapter 5), it is particularly interesting to look at how such gains were undermined by uneven economic development in the cases of Egypt, Tunisia and Syria. Significantly, the very foundations of economic development were shaky: the growth experienced by the three cases in the 1970s was based in large part on the (temporary) windfall in oil revenues following the events of 1973; and, in the cases of

Fig. 7.11 Comparing the Sustainability of Economic Growth: Developmental States and Other States



In brief, the nine developmental states displayed the most exceptional records of all the developing countries during the 1970-90 period. They were the *only* states which managed to combine high rates of sustained economic growth with extremely strong human development performance. Furthermore, that these records were achieved under a diverse set of operating circumstances lends credence to Leftwich's emphasis on the "primacy of

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Egypt and Syria, on a heavy reliance on foreign aid, particularly from other Arab states. Egypt's growth depended on "external rents to prop up the economy" (Brumberg 1992: 90): revenue from oil; expatriate workers; revenue from the Suez Canal; and foreign aid (first from the Gulf Arab states, and then from the U.S.). By 1980 two factors had combined to grind economic growth to a halt: Egypt's enormous external debt, which had financed the industrialization projects of the previous decade; and the decision by Arab donors to suspend aid following Egypt's peace accord with Israel (ibid: 86). As in most Middle Eastern states, Egypt's inefficient and bloated public sector "served one primary purpose, employment" (ibid: 79). Tunisia differed from Egypt and Syria in three key respects: it relied more heavily on its economic bureaucracy and teams of 'technocrats'; it encouraged the private sector to a much greater extent; and it had a more transparent bureaucratic apparatus, so that political connections were less important to businessmen and corruption was less widespread (Bellin 1991: 48-54). However, despite attempts in the 1970s to encourage a more vibrant private sector (ibid: 50-52), the state sector grew uncontrollably on the strength of oil revenues, with predictable results: financial losses by the public sector mounted, leading to "a rapid growth in the external debt, and an insupportable...deterioration in the country's balance of payments" (Grissa 1991: 125). Syria also benefited from higher world oil prices and substantial Arab aid (Perthes 1995: 42). The latter factor was crucial: public expenditure was the "main determinant of the course of economic development" (ibid: 3), with "Arab aid...(enabling) the regime to pursue a large-scale investment programme" (ibid: 42). The reduction in aid by the early 1980s, together with the fall in the price of oil, meant that economic growth could not be sustained (Heydemann 1992: 18). As in the case of Egypt, mismanagement and corruption were rampant, and development policy, which was never fully defined, had more to do with (party) political considerations and patronage than economic efficiency (Heydemann 1992: 18; Perthes 1995: 44-46).

politics". Consider, for example, how little the developmental states had in common on several other fronts (Table 7.19).

Table 7.19 Comparing Developmental States (Selected Variables)

Developmental State	LoD 1970/ 1990	Lev of EconDev* 1970	Econ Syst**	Size of Gov't*** 1970	Social Expend.**** 1970
Botswana	3.0	INC 4	CAP	34% (L)	16% (M)
Korea, S.	4.1	INC 3	CAP	19% (M)	17% (M)
Singapore	4.5	INC 2	MIX-CAP	17% (M)	24% (M)
China	6.7	INC 4	MIX-SOC	N/A	N/A
Indonesia	5.5	INC 4	CAP-STAT	15% (M)	9% (L)
Thailand	4.4	INC 3	CAP	17%(M)	24% (M)
Malaysia	2.6	INC 3	CAP	26% (L)	30% (H)
Hong Kong	4.0	INC 2	CAP	N/A	N/A
Mauritius	2.2	INC 3	CAP	16% (M)	24% (M)

Notes. * Basedon 1970 GDP/C rates: $1133/$388(INC 2), $378/$187(INC 3), $175/$54(INC 4)
** see footnote 2 for descriptions.
*** see footnote 3 for descriptions. L='large' government, M='medium-size' government
**** see footnote 4 for descriptions. H='high' (spending state), M='medium', L='low'

Malaysia and Mauritius were the only states with democratic LoD values,[25] only China had a period LoD value in the 6-7 range, and the remaining six states had LoD values between 3.0-5.9. There was a considerable gulf between the levels of economic development at the beginning of the period: Singapore and Hong Kong were at the INC 2 level; South Korea, Thailand, Malaysia and Mauritius were at the INC 3 level; and Botswana, China and Indonesia were at the INC 4 level. In terms of economic structures, six states operated within a Capitalist system, one within a Mixed-Capitalist system (Singapore), one within a Capitalist-Statist system (Indonesia), and one within a Mixed-Socialist system (China). The size of government measure revealed some discrepancies, ranging from a high of 34% for Botswana to a low of 15% for Indonesia; viewed by category, Botswana and Malaysia had 'large-size' governments, whereas South Korea, Singapore, Indonesia, Thailand and Mauritius all had 'medium-size' governments (data was unavailable for China and Hong Kong). An equally diverse set of figures is found for social expenditure levels: Malaysia (30%) was the only 'high-spender'; Botswana, South Korea, Singapore, Thailand and Mauritius were all 'medium-spenders' (15-24%); and Indonesia (9%) was the only 'low-spender' (data was not available for China and Hong Kong).

[25]Of the four developmental democratic states identified by Leftwich, Malaysia and Mauritius were labeled as 'coalitional', whereas Botswana and Singapore were labeled as 'dominant-party'. Given their more inclusive nature, it is not surprising that, using the LoD measure, the 'coalitional' states statistically qualified as democracies (1.0-2.9) whereas the 'dominant-party' states did not (Botswana barely failed to qualify, but Singapore was some way off).

Developmental states may not, therefore, be stereotyped by level of democracy, initial level of economic development, economic system, size of government, or level of social expenditure. The glue binding these seemingly diverse cases together is *political* in nature. This does not suggest that all developmental states necessarily conform to Leftwich's political model of the developmental state to the same degree (they do not), nor does it ignore some of the obvious similarities between their developmental strategies.[26] Simply put: "the distinguishing characteristic of developmental states is that their political purposes and institutional structures have been driven by developmental needs, while their developmental objectives have been politically driven" (Leftwich 1996b: 289-290).

A Closer Look at the Individual Records of Developmental States

Having outlined the general progress made by the nine developmental states in terms of human development, the individual accomplishments will now be considered in greater detail. These records must be evaluated in the context of the different starting levels at the beginning of the period, given that some states (Hong Kong and Singapore) were more developed than others (Botswana and Indonesia) (Table 7.20).

Table 7.20 Human Development Profiles For Developmental States, 1970-90

Devel'tal State	GNP/C 1965/ 1990	HDI 1970	HDI 1990	HDI 1970/ 1990	Shortf Red. Rate	ISC 1970	ISC 1990	ISC 1970/ 1990	Shortf Red. Rate	I-HDI 1970	I-HDI 1990	I-HDI 1970/ 1990	Shortf Red. Rate
Botswana	8%	0.284	0.670	0.386	54%	0.652	0.754	0.102	29%	0.468	0.712	0.244	46%
Korea, S.	7%	0.523	0.859	0.336	70%	0.602	0.839	0.237	60%	0.563	0.849	0.287	66%
Singapore	7%	0.682	0.836	0.154	48%	0.751	0.796	0.045	18%	0.717	0.816	0.099	35%
China	6%	0.372	0.644	0.272	43%	0.408	0.583	0.175	30%	0.390	0.613	0.223	37%
Indonesia	5%	0.306	0.586	0.280	40%	0.235	0.617	0.382	50%	0.271	0.602	0.331	45%
Thailand	4%	0.465	0.798	0.333	62%	0.616	0.730	0.114	30%	0.541	0.764	0.223	49%
Malaysia	4%	0.471	0.794	0.323	61%	0.720	0.722	0.002	1%	0.595	0.758	0.163	40%
Hong K.	6%	0.737	0.875	0.138	52%	0.845	0.863	0.018	12%	0.791	0.869	0.078	37%
Mauritius	3%	0.524	0.778	0.254	53%	0.787	0.815	0.028	13%	0.656	0.797	0.141	41%

[26]It is widely accepted that the East Asian developmental states have, to varying degrees, all attempted to emulate the export-driven developmental strategy adopted by Japan since the Second World War (Johnson 1982; Wade 1990; Bhardwaj and Vijayakrishnan 1998; Kim 1998). Regardless of any differences in application, the policies adopted have produced the following defining characteristics: (1) a high average rate of economic growth; (2) reduced inequality; (3) more rapid output and productivity growth in agriculture; (4) higher rates of growth of manufactured exports; (5) earlier and steeper declines in fertility; (6) higher growth rates of physical capital, supported by higher rates of domestic savings; (7) higher initial levels and growth rates of human capital; and (8) generally higher rates of productivity and growth (Bhardwaj and Vijayakrishnan 1998: 12). In turn, the strategies of the East Asian NICs have been fairly blatantly copied by Mauritius (Mannick 1989: 101-102; Bowman 1991: 127), especially in its creation of the Export Processing Zones. Indeed, by the late 1980s Mauritian politicians had come to think of their country as a "Little Tiger" (Bowman 1991: 122). Botswana's spectacular growth was largely based on the development of its mineral sector (copper-nickel and, especially, diamonds)(Picard 1987: 232-233). Like the East Asian developmental states, Botswana has relied heavily on its highly efficient bureaucracy to formulate and execute development strategies (ibid: 147).

Arguably, the most exceptional performer of all was South Korea. During the course of two decades, South Korea witnessed reductions of 70% in its HDI shortfall, 60% in its ISC shortfall, and 66% in its I-HDI shortfall. These reductions propelled South Korea from the Medium to the High index levels by 1990. The remaining nine cases may roughly be divided into four groups. Among the cases which moved from the Low to Medium Levels for at least two of the indices were Botswana (HDI, I-HDI), China (HDI, ISC, I-HDI), and Indonesia (HDI, ISC, I-HDI). Both Thailand (ISC, I-HDI) and Mauritius (HDI, I-HDI) moved from the lower to upper Medium index levels. Malaysia had a unique record, moving from the Low to Medium HDI Levels, showing little movement within the Medium ISC Level, and moving from the lower to upper part of the Medium I-HDI Level. Singapore (HDI, I-HDI) and Hong Kong (HDI, I-HDI) both moved from the Medium to High index levels.

These changes in the composite indices highlighted the increases in the levels of the specific indicators (Table 7.21 overleaf). It is at this level of analysis where the diversity of the individual accomplishments can perhaps be most appreciated. Regarding adult literacy rates, for example, neither Botswana nor Indonesia had very literate populations in 1970 (41% and 54%). Not surprisingly, these two states produced the largest absolute rate increases over the period (34% and 30%, respectively). In contrast, the more incremental period increase for South Korea (8%) was due to its already high level of literacy (88%). Of the three states with almost identical rates in 1970 (68-69%), Singapore's period increase (21%) was considerably better than the increases for China (10%) and Mauritius (12%). Seven of the nine developmental states had literacy rates above 80% by 1990 (excepting Botswana and China), four of which had rates above 90%: South Korea (96%), Thailand (94%), Hong Kong (91%) and Singapore (90%).

There were also substantial discrepancies in terms of life expectancy rates: 24 years separated Hong Kong (70) and Indonesia (46) in 1970; the gap had narrowed to 15 years by 1990 because of Indonesia's dramatic increase (16). Botswana increased its rate from 49 years in 1970 to 60 years in 1990. Of the four states with comparably higher life expectancy rates in 1970 (60 years or more), China showed the highest rate increase (11), followed by Mauritius (8), Hong Kong (7) and Singapore (6). Whereas only Hong Kong had a life expectancy rate of 70 years in 1970, six states had equaled or surpassed this mark by 1990: Hong Kong (77), Singapore (74), China (71), South Korea (70), Malaysia (70), and Mauritius (70).

Seven developmental states displayed relatively high child survival rates (90%+) in 1970, led by Hong Kong (98%) and Singapore (97%). Indonesia, however, had a rate of only 82%, suggesting that roughly one in five children could not be expected to reach the age of five; this situation had improved noticeably by 1990, when its child survival rate increased to 90%. The other state below the 90% mark in 1970, Botswana (86%), produced an increase of 5% (to 91%). All developmental states had child survival rates above 90% by 1990, six of which had rates of 97%+.

Table 7.21 A Detailed Overview of the Records of Developmental States (1970-90), By Indicator

Indicator	Reference	Developmental States								
		Bots	SKor	Sing	Chin	Indo	Thai	Mala	HKon	Maur
Adult Literacy (%)	1970	41	88	69	69	54	79	60	77	68
	1990	75	96	90	79	84	94	80	91	80
	D/70-90	34	8	21	10	30	15	20	14	12
Life Expectancy (yrs)	1970	49	58	68	60	46	57	59	70	62
	1990	60	70	74	71	62	69	70	77	70
	D/70-90	11	12	6	11	16	12	11	7	8
Child Survival (%)	1970	86	93	97	90	82	90	94	98	92
	1990	91	97	99	96	90	97	97	99	97
	D/70-90	5	4	2	6	8	7	3	1	5
Civil Liberties	1970	4.0	6.0	5.0	7.0	5.0	5.0	3.0	2.0	2.0
	1990	2.3	3.0	4.3	6.7	5.0	3.0	4.3	2.0	2.0
	PerAvg	3.0	5.1	4.9	6.4	5.2	3.9	4.0	2.0	2.4
LIB Index	1970	0.606	0.512	0.637	0.401	0.484	0.570	0.770	0.893	0.840
	1990	0.805	0.802	0.713	0.482	0.567	0.798	0.695	0.909	0.888
	D/70-90	0.199	0.290	0.076	0.081	0.083	0.229	-0.075	0.016	0.048
Peace/ Stability (CONF)	1970	1.000	1.000	1.000	0.000	0.000	0.784	0.780	1.000	1.000
	1990	1.000	1.000	1.000	0.795	0.784	0.794	0.787	1.000	1.000
	D/70-90	0.000	0.000	0.000	0.795	0.784	0.010	0.007	0.000	0.000
Inflation Rate (%)	1970	4	18	1	-1	63	2	0	2	4
	1990	13	6	2	6	8	4	2	8	8
	PerAvg	12	13	4	3	15	6	4	8	12
SEC Index	1970	0.956	0.825	0.989	0.500	0.000	0.874	0.890	0.976	0.964
	1990	0.868	0.944	0.981	0.840	0.807	0.860	0.877	0.925	0.919
	D/70-90	-0.088	0.119	-0.008	0.340	0.807	-0.014	-0.013	-0.051	-0.045
Tertiary Enrolment (%)	1970	0	8	7	0	3	2	2	7	3
	1990	3	38	8	2	9	16	5	18	2
	D/70-90	3	30	1	2	6	14	3	11	-1
GendEq. (GEND) Index	1970	0.277	0.404	0.468	0.488	0.246	0.361	0.371	0.408	0.290
	1990	0.520	0.780	0.672	0.522	0.456	0.464	0.597	0.724	0.518
	D/70-90	0.243	0.376	0.204	0.033	0.210	0.103	0.226	0.317	0.229
%NonAgr Rate	1970	13	50	96	23	34	20	44	96	66
	1990	72	83	100	27	44	33	74	99	84
	D/70-90	59	33	4	4	10	13	30	3	18
MOB Index	1970	0.137	0.366	0.506	0.240	0.195	0.208	0.277	0.489	0.329
	1990	0.427	0.704	0.593	0.271	0.334	0.340	0.467	0.650	0.463
	D/70-90	0.290	0.368	0.087	0.032	0.140	0.132	0.189	0.161	0.133

Notes. D/70-90 means the difference between the 1990 and 1970 values, whereas PerAvg means the average rate for the entire period.

The picture for civil liberties was fairly bleak around 1970: only Hong Kong and Mauritius had strong CL values (2.0), followed by Malaysia (3.0) and Botswana (4.0). The worst offenders were China (7.0) and South Korea (6.0). By contrast, just over half of the cases (5) had 'respectable' CL values (below the median point of 3.5) by 1990: Hong Kong (2.0), Mauritius (2.0), Botswana (3.0), Thailand (3.0) and South Korea (3.0). Judging by their average CL values over the entire period, only Hong Kong (2.0), Mauritius (2.4) and Botswana (3.0) had respectable scores, followed at a slight distance by Malaysia (4.0) and Singapore (4.9).

According to the Liberty Index (LIB), which combines child survival and civil liberties indicators, Hong Kong (0.893) showed the greatest degree of overall 'liberty/freedom' in 1970, followed by Mauritius (0.840) and Malaysia (0.770). At the other extreme, both China (0.401) and Indonesia (0.484) fell below the 0.500 mark. But a considerable change had occurred by 1990, with the number of cases displaying LIB values above 0.700 doubling to six, four of which had High LIB values (0.800+): Hong Kong (0.909), Mauritius (0.888), Botswana (0.805) and South Korea (0.802). Thailand (0.798) fell just shy of the 0.800 threshold, whereas China (0.482) and Indonesia (0.567) continued to display much lower values. Predictably, the largest absolute changes in LIB levels over the period were found for newly-democratized South Korea (0.290) and Thailand (0.229). Malaysia (-0.075) was the only case where LIB values actually declined over the period - a phenomenon directly attributable to its poorer status on civil liberties (from 3.0 in 1970 to 4.3 in 1990 on the inverted CL scale).

Five of the nine developmental states enjoyed complete socio-political tranquility around 1970, as indicated by their perfect scores of 1.000 for the peace/stability (CONF) index. Four cases experienced some measurable degree of strife, from the severe internal conflicts which engulfed Indonesia (0.000) and China (0.000), to the low-intensity conflicts in Thailand (0.784) and Malaysia (0.780). Although the same number of developmental states (5) had values of 1.000 in 1990, the conflicts in the remaining four cases were, on the whole, not as severe as in 1970, principally because China (0.795) and Indonesia (0.784) had become largely stabilized; roughly the same degree of low-intensity conflict continued in Thailand and Malaysia.

The measure of economic (in)stability, inflation, showed a slight diversity of results. Seven of the nine states had inflation largely under control (5% or less) in 1970. South Korea (18%) did not fare as well, although only Indonesia (63%) experienced runaway inflation. By 1990, however, only three states had rates below 5%: Singapore, Thailand, and Malaysia. Five cases had rates between 6-10% (South Korea, China, Indonesia, Hong Kong, Mauritius), but only Botswana (13%) exceeded the 10% mark. Looking at the average rates of inflation throughout the period, just over half of the developmental states (5) had rates below 10%, of which only Singapore, China and Malaysia had rates below 5%. Less impressive period averages were produced by Botswana (12%), Mauritius (12%), South Korea (13%) and Indonesia (15%).

Embodying the above two component dimensions, the Security Index (SEC) confirms that seven developmental states displayed High SEC values (0.800+) in 1970, led by Singapore (0.989), Hong Kong (0.976), Mauritius (0.964) and Botswana (0.956). With its combination of socio-political instability and economic stability (as captured by the rate of inflation), China produced a SEC value of 0.500, whereas Indonesia's combination of complete socio-political *and* economic instability produced a SEC value of 0.000. By 1990, however, all developmental states had SEC values above the 0.800 mark, led by Singapore (0.981), South Korea (0.944) and Hong Kong (0.925). The only substantial changes in SEC levels over the period were found, predictably, for China (0.340) and Indonesia (0.807); in the latter case, Indonesia's CONF value had improved from 0.000 to 1.000 and its inflation rate fell from 63% to 8%.

Turning to the first indicator of social mobility/opportunity, all nine developmental states had tertiary enrollment (TERT) rates below 10% in 1970, ranging from a high of 8% for South Korea to a low of around 0-1% for Botswana and China. Three states had surpassed the 10% mark by 1990: South Korea (38%), Hong Kong (18%) and Thailand (16%). Aside from these three cases, which produced increases over the period of 30%, 14%, and 11%, the other five states made very little progress on this front. Although Indonesia's rate climbed to 9% by 1990, four states continued to exhibit rates of 5% or less: Malaysia (5%), Botswana (3%), China (2%) and Mauritius (2%). Given their comparably lower adult literacy rates in 1970, and the fact that a sizeable proportion of their populations (20-25%) remained illiterate by 1990, it was perhaps to be expected that attention and resources in these five cases would be diverted to addressing more basic educational shortfalls (e.g. at the primary and secondary school levels).

The status of women was relatively low in the developmental states in 1970: all nine cases had gender equity (GEND) rates below the 0.500 mark. At one extreme were China (0.488) and Singapore (0.468), at the other were Botswana (0.277) and Indonesia (0.246). But GEND rates had improved greatly by 1990: seven cases surpassed the 0.500 threshold, led by South Korea (0.780) and Hong Kong (0.724), while Thailand (0.464) and Indonesia (0.456) fell just shy of the mark. In absolute terms, the greatest gains over the period were made by South Korea (0.376) and Hong Kong (0.317); the fewest gains were made by China (0.033) and Thailand (0.103).

The extent to which the developmental states underwent changes in their employment structures was reflected by the percentage of workers *not* employed in agriculture (%NonAgr). Six states were largely defined by agricultural-based employment in 1970 (%NonAgr rates of 50% or less). The most heavily dependent on agriculture were Botswana (13%), Thailand (20%) and China (23%); Singapore and Hong Kong (both 96%) were of course the least dependent. The situation had been completely reversed by 1990: only three states remained heavily dependent on agricultural-based employment (China, Indonesia and Thailand). Botswana experienced the largest transformation of all (59%), principally due to the development of its mining-based sectors; in fact, only 28% of

the workforce was employed in agricultural activity by 1990 (compared to 87% in 1970). Dramatic changes also occurred in South Korea (33%) and Malaysia (30%).

As gathered from the three preceding indicators, the developmental states in 1970 were characterized by very low levels of social mobility, a point succinctly captured by the Mobility Index (MOB). Only Singapore (0.506) and Hong Kong (0.489) may be thought of as partial exceptions. Seven states had MOB values below 0.400, four of which had values below 0.250: China (0.240), Thailand (0.208), Indonesia (0.195) and Botswana (0.137). By 1990, however, six states had MOB values above 0.400, three of which had values above 0.500 (compared to only one in 1970): South Korea (0.704), Hong Kong (0.650) and Singapore (0.593). In absolute terms, South Korea made the most progress over the period (0.368), followed at a distance by Botswana (0.290). The least progress was made by three states which began and ended the period with MOB values below the 0.400 mark: Indonesia (0.140), Thailand (0.132) and, especially, China (0.032).

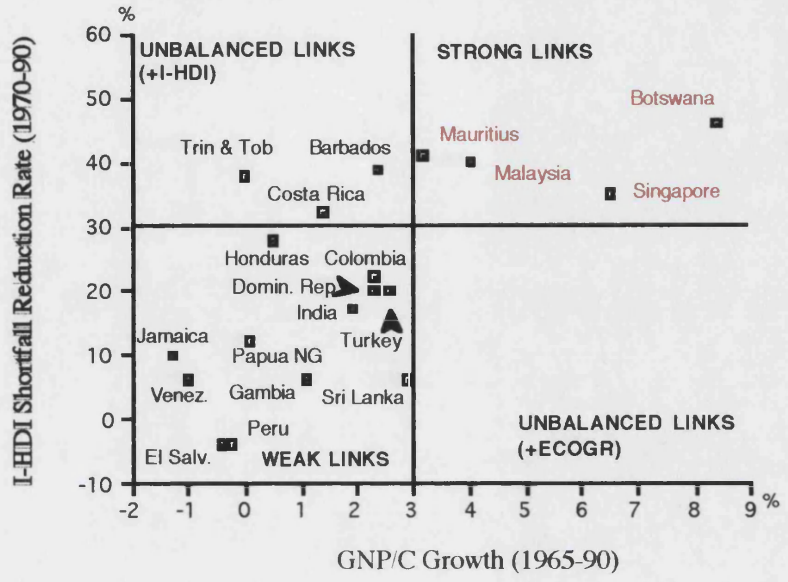
The diversity of their individual achievements illustrates the diversity of the challenges faced by each developmental state at the beginning of the period. No two developmental states produced largely identical records. Furthermore, as noted earlier (Table 7.19), these records were achieved in different operating circumstances. Nonetheless, by making sufficient progress in the areas they needed to - whether in terms of improving adult literacy, child survival rates, etc - developmental states produced strong overall human development records, supported by very high rates of economic growth.

Comparing the Records of Developmental and Non-Developmental Democratic States

The records of the four developmental democratic states - Mauritius, Malaysia, Botswana and Singapore - will now be directly compared against the records for the fifteen non-developmental democratic states in my sample. This latter group, consisting of those states with period democratic LoD values (1.0-2.9), includes ten 'stable' democracies (Barbados, Costa Rica, Venezuela, India, Trinidad and Tobago, Jamaica, Dominican Republic, Colombia, Papua New Guinea) and five 'unstable' democracies which experienced bouts of military rule during the period (Turkey, Gambia, El Salvador, Peru and Honduras). It will be recalled that the key *political* difference between the developmental and non-developmental variants is the role of "political elites and state structures" and their "determination and capacity to preside over economic growth and welfare" (Leftwich 1998: 52).

As illustrated so clearly in Figure 7.12, this distinction has been translated into considerably better aggregate records for the developmental democratic states, all of which displayed 'strong links' between economic growth and human development. Conversely, an

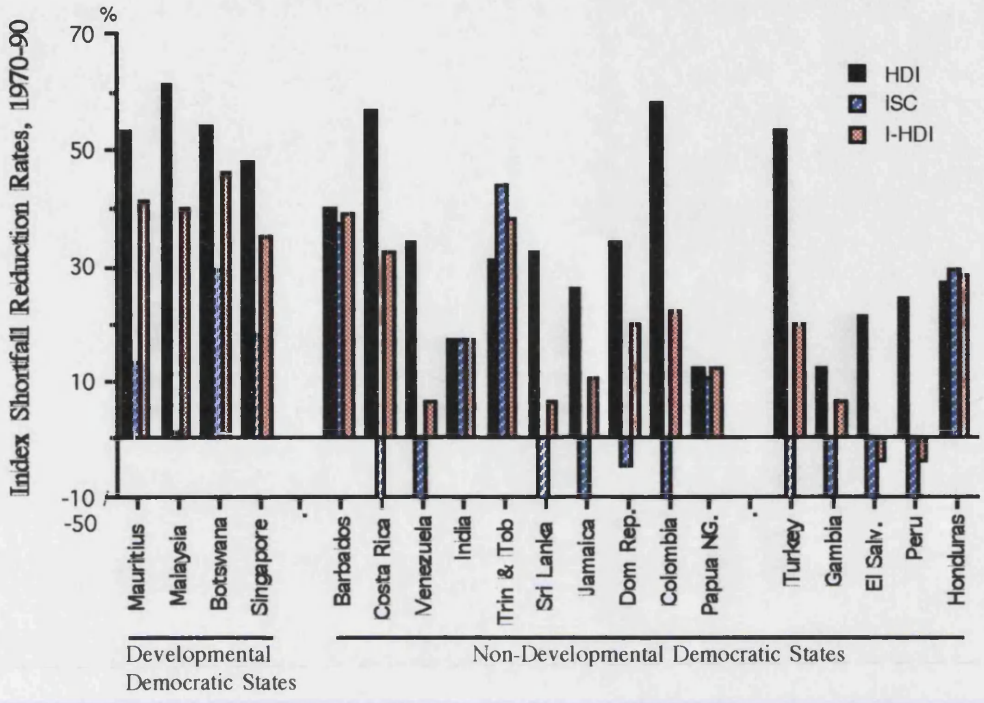
Fig. 7.12 Developmental and Non-Developmental Democratic States In Comparative Perspective, 1970-90



incredibly high proportion (12 of 15) of non-developmental democratic states produced 'weak links', including 7 of the 10 stable democracies and all five unstable democracies. Only three stable democracies showed 'unbalanced links' in favour of human development by surpassing the 30% I-HDI shortfall reduction threshold (Barbados, Costa Rica and Trinidad and Tobago). None of the fifteen non-developmental cases crossed the 3% GNP/C threshold, although Sri Lanka (2.9%) and Turkey (2.6%) were just shy of the mark.

Figure 7.13 below considers the human development perspective in greater detail by depicting the shortfall reduction rates (HDI, ISC and I-HDI) together. Two points need to be stressed. First, despite their excellent records, the developmental democracies did not necessarily display the highest reduction rates for each specific index. For instance, although Malaysia had the highest HDI reduction rate (61%), both Colombia (58%) and Costa Rica (57%) had better rates than Botswana (54%), Mauritius (53%) and Singapore (48%); Turkey's rate was comparable (53%). In terms of the ISC, the best reduction rate was produced by Trinidad and Tobago (44%); Honduras' rate (29%) was identical to Botswana's, but better than the rates for Singapore (18%), Mauritius (13%) and Malaysia (1%). Moreover, whereas Botswana (46%), Mauritius (41%), and Malaysia (40%) produced the best I-HDI reduction rates, Barbados (39%) and Trinidad and Tobago (38%) were only slightly behind, though still above Singapore (35%).

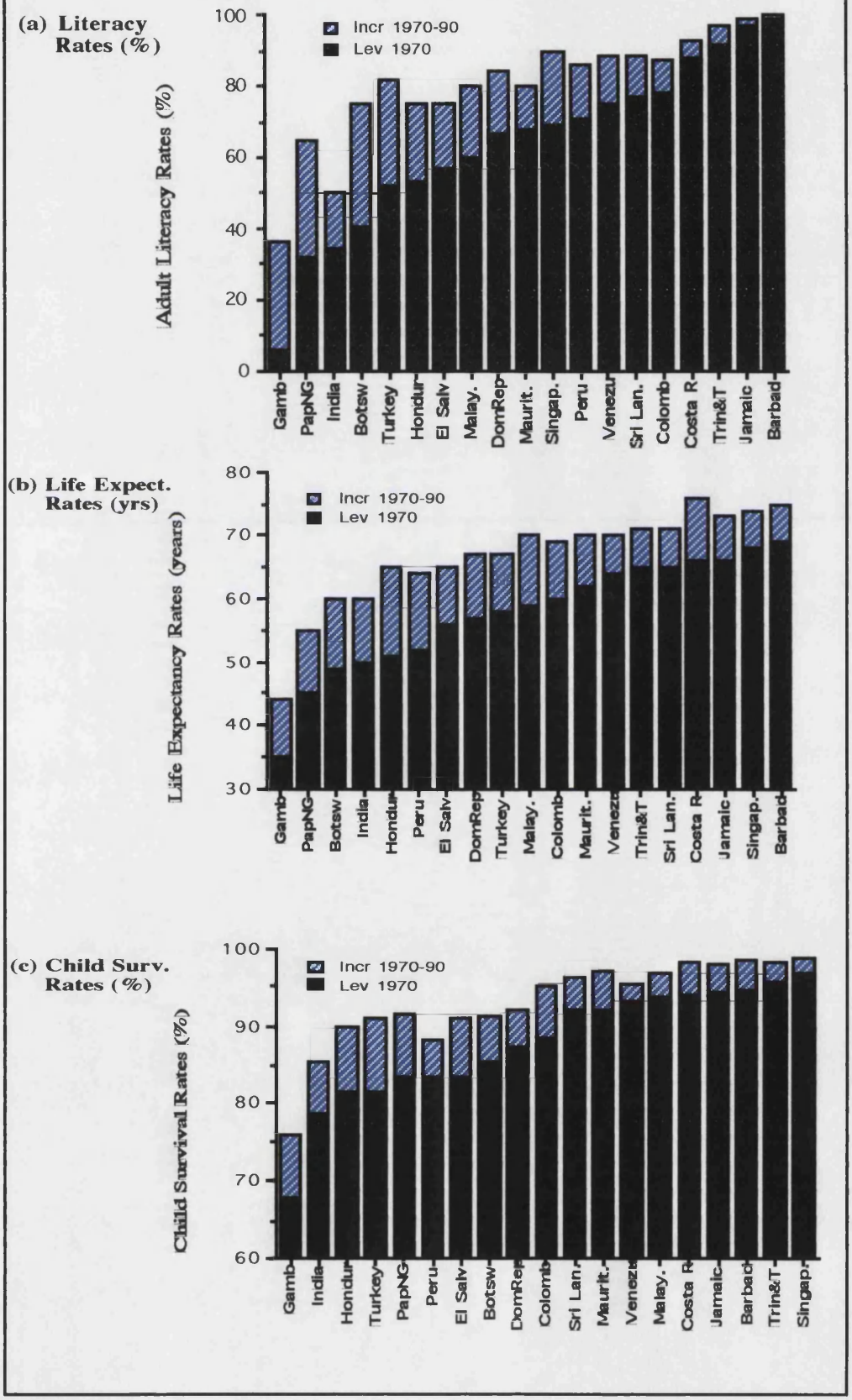
Fig. 7.13 Comparing Index Shortfall Reduction Rates, 1970-90: Developmental and Non-Developmental Democratic States

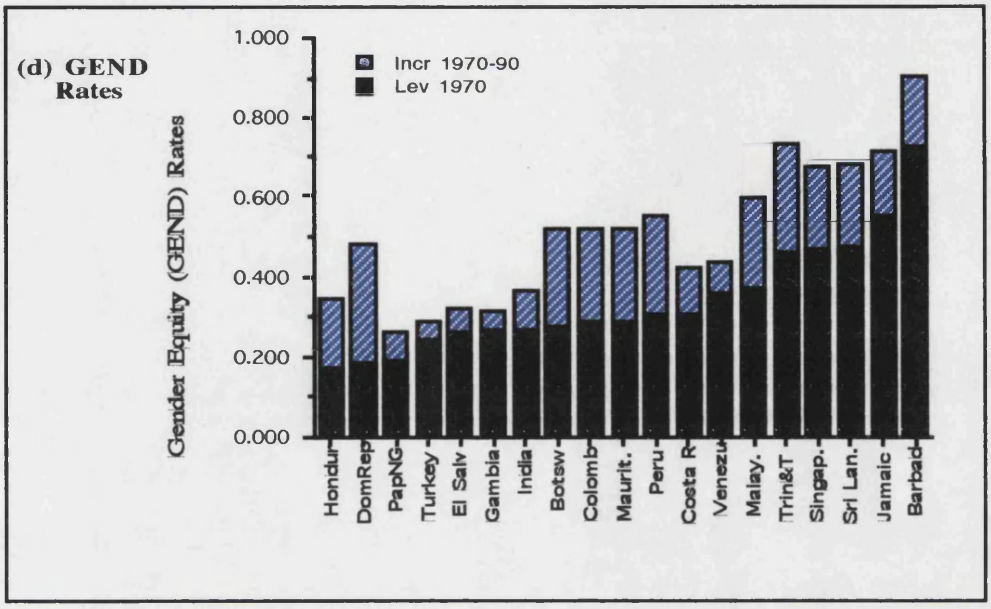


However, the developmental democracies did exhibit high reduction rates on a fairly consistent basis. All four states had HDI and I-HDI reduction rates above the 30% threshold, an accomplishment matched by only Barbados, Trinidad and Tobago and Costa Rica; the latter's record is somewhat tainted by its negative ISC rate (-21%). Looking across the spectrum, two non-developmental democratic states (Papua New Guinea and Gambia) failed to even reach the 15% reduction threshold for the HDI, and just under half (7) failed to reach the 15% reduction threshold for the I-HDI. Nine of the 15 non-developmental democracies actually showed a deterioration in social conditions (negative ISC reduction rates); the most dramatic declines were observed for the conflict-ravaged cases of El Salvador (-48%), Peru (-39%), Colombia (-39%), and Sri Lanka (-35%), and the inflation-plagued case of Venezuela (-36%).

It should also be noted that the four developmental democratic states did not necessarily produce the highest period increases for key indicators such as adult literacy, life expectancy, child survival and gender equity (Figure 7.14). Compared to other states beginning from broadly similar literacy levels in 1970 (graph a), Botswana's increase (34%) was only fractionally better than the increases for Papua New Guinea (33%) and Turkey (30%); Honduras (22%) was further behind, followed by India (16%). Of the nine

Fig. 7.14 Comparing Developmental and Non-Developmental Democratic States: Selected Indicators, 1970-90





cases beginning from the 55-80% literacy levels, the increases produced by Singapore (21%) and Malaysia (20%) were slightly higher than those for El Salvador (18%) and the Dominican Republic (17%); Mauritius' increase (12%) was identical to Sri Lanka's, better than Colombia's (9%), but worse than Peru's (15%) and Venezuela's (14%).

Botswana's low life expectancy rate in 1970 (41 years) placed it in the company of four other states with rates between 45-54 years (graph b): its rate increase (11yrs) was better than India's (10 yrs) and Papua New Guinea's (10 yrs), but worse than Honduras' (14 yrs) and Peru's (12 yrs). Malaysia's increase (11 yrs) was the highest in the 55-64 years range, followed closely by the Dominican Republic (10 yrs); the increase for Mauritius (8 yrs) was lower than the increases for El Salvador, Turkey and Colombia (all 9 yrs), but higher than Venezuela's (6 yrs). Among the states at the highest levels (66+ yrs) in 1970, Singapore had the same increase as Barbados (6 yrs); Costa Rica (10 yrs) produced the highest increase, followed by Jamaica (7 yrs).

Of the eight countries starting from child survival levels of 80-89% (graph c), Botswana showed the sixth-highest increase (5.7%); Turkey made the greatest progress (9.3%), followed by Papua New Guinea (8.3%) and Honduras (8.2%). Mauritius produced the highest increase (4.8%) among the states in the 90-95% range, barely ahead of Sri Lanka (4.4%) and Costa Rica (4.1%); Malaysia's increase (3.3%) was almost identical to Jamaica's (3.5%) and Barbados' (3.9%). Already showing the highest child survival rate in 1970, Singapore (97.0%) improved its rate by 1.8%.

Regarding gender equity rates (graph d), Botswana and Mauritius both began the period with GEND values which placed them among the middle ranks (0.240/0.310): Botswana's increase (0.243) was similar to Peru's (0.247), while Mauritius's increase

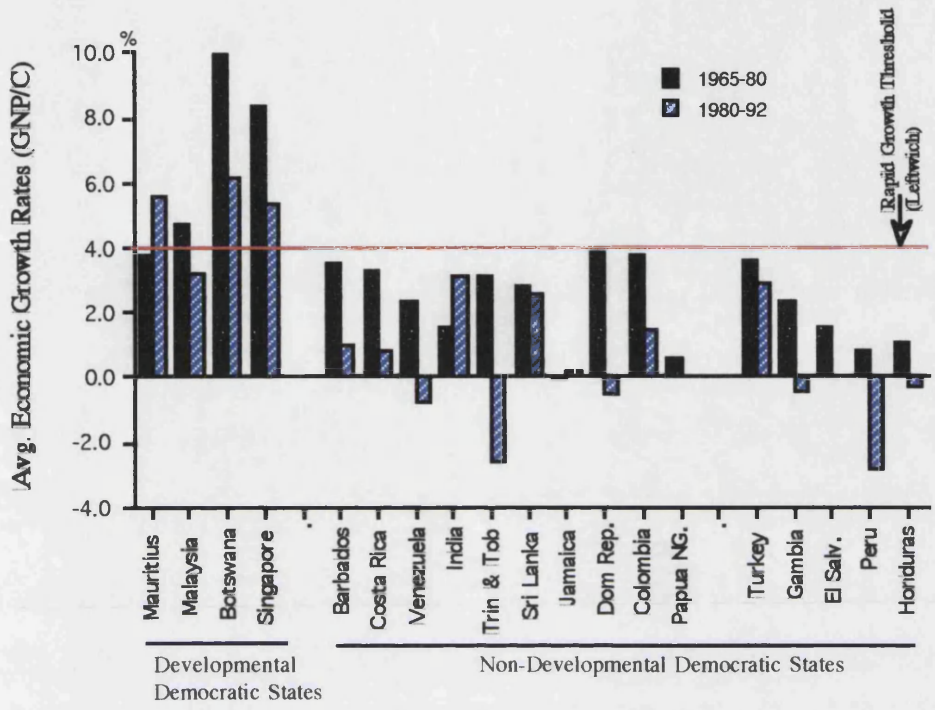
(0.229) was similar to Colombia's (0.231); the least progress was made by Turkey (0.040), Gambia (0.047) and El Salvador (0.057). Malaysia began from virtually the same plateau (0.371) as Venezuela (0.358) but its period increase (0.226) was almost three times higher (0.082). Of the three states in the 0.450/0.499 range, Singapore produced a lower GEND increase (0.204) than both Sri Lanka (0.214) and Trinidad and Tobago (0.271).

Given that the four developmental democracies produced very good, though not necessarily the highest, rate increases for these key indicators, an observation that was also recorded above for the composite indices, one must again return to the issue of economic growth, where the discrepancies between the two samples become pronounced (Figure 7.15).[27] No non-developmental democracy, with the partial exception of Turkey (3.6% and 2.9%), managed to sustain strong economic growth over the two shorter periods, and no non-developmental democracy managed to cross Leftwich's rapid growth (4.0%) threshold in either period. Six of these states had rates above 3.0% in the first period (Barbados, Costa Rica, Trinidad and Tobago, the Dominican Republic, Colombia and Turkey), but only India (3.1%) surpassed this mark in the second period. Conversely, whereas six states had rates of 1.5% or less in the first period (India, Jamaica, Papua New Guinea, El Salvador, Peru and Honduras), twelve states shared this dismal distinction in the second period (all but India, Sri Lanka and Turkey); moreover, six of these states actually produced negative average growth rates (Venezuela, Trinidad and Tobago, the Dominican Republic, Gambia, Peru and Honduras). Despite posting strong growth records over the first period, Barbados (3.5% and 1.0%), Costa Rica (3.3% and 1.0%) and Trinidad and Tobago (3.1% and -2.6%) - the three most promising cases in terms of human development (recall Figures 7.12 and 7.13) - also failed the sustainability test.

If, therefore, one defines the term 'developmental' according to the 'growth and welfare' thesis, only Mauritius, Malaysia, Botswana and Singapore truly deserve this accolade among the (de jure or de facto) democratic states in the sample. In addition to producing rapid economic growth on a sustained basis, they were the only states to establish 'strong links' between economic growth and human development performance.

[27]The actual GNP/C rates for the two periods (1965-80 and 1980-92) were: 3.7% and 5.6% for Mauritius; 4.7% and 3.2% for Malaysia; 9.9% and 6.1% for Botswana; 8.3% and 5.3% for Singapore; 3.5% and 1.0% for Barbados; 3.3% and 0.8% for Costa Rica; 2.3% and -0.8% for Venezuela; 1.5% and 3.1% for India; 3.1% and -2.6% for Trinidad and Tobago; 2.8% and 2.6% for Sri Lanka; -0.1% and 0.2% for Jamaica; 3.8% and -0.5% for Dominican Republic; 3.7% and 1.4% for Colombia; 0.6% and 0.0% for Papua New Guinea; 3.6% and 2.9% for Turkey; 2.3% and -0.4% for Gambia; 1.5% and 0.0% for El Salvador; 0.8% and -2.8% for Peru; 1.1% and -0.3% for Honduras. (Source: World Bank data in UNDP 1994.)

Fig. 7.15 Comparing the Sustainability of Economic Growth: Developmental and Non-Developmental Democratic States



7.5 Summary of Chapter Findings

On the basis of this chapter's findings, four general observations may be forwarded: (1) economic growth has a strong impact on human development performance, although the relationship between the variables is not automatic (section 7.1); (2) general rates of economic growth are not influenced by the level of democracy, although sustained rapid growth is most often achieved by non-democratic regimes (section 7.2); (3) the level of democracy does not influence the establishment of a 'virtuous cycle' between economic growth and human development performance (section 7.3); and (4) the nature and role of the state is the crucial variable in the development process, as demonstrated by the most exceptional performers, developmental states (section 7.4).

The correlations between economic growth and human development performance were found to be positive and moderate, but stronger for the sample of developing states

(Table 7.1). Average economic growth rates varied directly by human development performance group: the highest average economic growth rate was produced by the highest I-HDI performance group; the second-highest average growth rate was produced by the second-highest performance group; and so on (Figure 7.1). That the relationship between economic growth and human development is strong but not automatic was further demonstrated by examining distribution patterns (Figure 7.2) and rank positions (Table 7.2).

When levels of economic development and human development were controlled for, stronger economic growth appeared to coincide with marked improvements in human development conditions in poor, less developed countries, but less so in relatively wealthier, more developed countries (Figure 7.3). The relationship between economic growth and human development also needs to be qualified in another way. While economic growth does influence overall human development conditions, it does not appear to directly influence the four key individual indicators - literacy, life expectancy, child survival and gender equity - to the same extent (Tables 7.3, 7.4, 7.5).

The correlations between economic growth and levels of democracy were very weak for both samples (Table 7.8). The lack of any relationship was also shown by the similar percentages of countries from each level of democracy with economic growth rates above the developing average (Table 7.9), and by the similar average growth rates produced by the three levels of democracy (Figure 7.4).

Across the regions, it was shown that no level of democracy consistently produced the highest average rates of economic growth throughout, and that there was considerable variation within each level of democracy (Figure 7.5, Table 7.10). However, rapid economic growth rates (4.0%+) were almost exclusively achieved by non-democratic states (Tables 7.11 and 7.12).

When levels of human and economic development were controlled for, no level of democracy managed to consistently translate economic growth - regardless of the rate - into higher human development gains (Figures 7.6 and 7.7). Moreover, the (almost exclusively non-democratic) rapid growth states often produced dissimilar human development gains; these gains were sometimes lower than those recorded for countries with slower rates of growth (Figure 7.8).

The level of democracy had little effect, in general, on the nature of the 'links' between economic growth and human development performance (Tables 7.15, 7.16 and Figure 7.9). None of the three additional variables considered - structure of the economy, size of government, and government social expenditures - had any noticeable impact on human development performance (Tables 7.6 and 7.7) or economic growth (Tables 7.13 and 7.14).

The developmental states identified by Adrian Leftwich were undoubtedly the best performers over the 1970-90 period because of their unique ability to combine high rates of sustained economic growth and strong human development gains (Tables 7.17, 7.18;

Figures 7.10, 7.11). That they operated under different structural circumstances (Table 7.19) lends weight to Leftwich's argument regarding the "primacy of politics".

Given their different starting levels in 1970, the nature and magnitude of the gains made by the developmental states differed in terms of the composite indices (Table 7.20) and the individual indicators (Table 7.21). The four developmental democratic states - Singapore, Malaysia, Botswana and Mauritius - did in fact produce much better overall records than the non-developmental democracies in the sample (Figures 7.12, 7.13 and 7.15).

CHAPTER 8
CONCLUSION: THE FINDINGS ON DEMOCRACY AND HUMAN DEVELOPMENT

In contributing to the debate concerning democracy and development, this thesis accepts the concept of human development as the only truly universal and moral yardstick, one which may serve as the cornerstone of new efforts to reinvigorate comparative politics with a normative dimension. New indices have been constructed for the purposes of this research, including a new measure of democracy, the Level of Democracy (LoD) index, and a new measure of human development, the Integrated Human Development Index (I-HDI). Using time-series data (1970-90) from a large cross-national sample (123 countries), this thesis has filled a gap in existing research by comprehensively analyzing the relationship between democracy and human development levels and performance.

Much has been written on democracy and development since the end of the Second World War, largely by political scientists falling within the loose umbrella referred to as the political development school. Optimistic initial assessments were based upon the untested proposition that democracy not only corresponded to higher levels of development but also served as the vehicle best suited for propelling states to higher levels. The subsequent failure of democracy to take root in the developing world, coupled with the apparent success of some non-democratic regimes at embarking on national development programs, ensured that this view quickly gave way to more sober observations which held that, while democracy did correspond to higher levels of development, the actual process of development (or 'modernization') required some form of bureaucratic-authoritarian regime to both ensure a sufficient degree of order and stability, by containing some of the inherently destabilizing consequences of rapid socio-economic change, and to guide the national project successfully along.

Yet others focused their attentions exclusively on the first part of the relationship; specifically, the potential preconditions for the emergence and maintenance of democratic governance. The issue of development, interpreted principally in terms of national income levels, formed part of an overall picture which included other key variables such as political culture, socio-economic cleavages, and the impact of external actors.

With the emergence of the humanist approach in the 1960s and 1970s, the tendency to equate development primarily with 'economic development' was abandoned in favour of a broader concern with the concept of human development. Despite the noticeable shift in emphasis, political humanists arrived at the same basic conclusion as political development theorists regarding democracy and levels of development: democratic institutions and practices are more valued, and thus more likely to take root and persist, in countries at

higher levels of human development (the 'saliency of needs' argument). Since most political humanists held a purely instrumentalist view of politics ('whatever works best is morally justifiable'), there was little speculation about which form of government might be best suited to the task of improving, in the shortest possible period of time, living conditions in countries found at lower levels of human development. However, some assumed, again along with the political development theorists, that modernizing authoritarian regimes operating within the parameters of a strong state structure could create the material conditions which would make democracy more likely at a future stage.

Returning to the seminal question asked at the onset of the investigation - 'Is democracy typically the by-product of development, the catalyst for development, or neither?' - the consensus in both the political development and political humanist camps therefore held that democracy was more likely to be the by-product of development, not its catalyst. Interpreted explicitly in the context of human development, the empirical findings in this thesis clearly confirm these assumptions to be correct.

8.1 Establishing the Relationships: Democracy and Human Development, 1970-90

Insofar as any generalizations are warranted, it may be argued that, while there is a relationship between democracy and higher levels of human development, there is no relationship between democracy and human development performance. While each part of this argument has been treated separately and at considerable length in Chapters 4-7, it may prudent to summarize and compare the results in tandem.

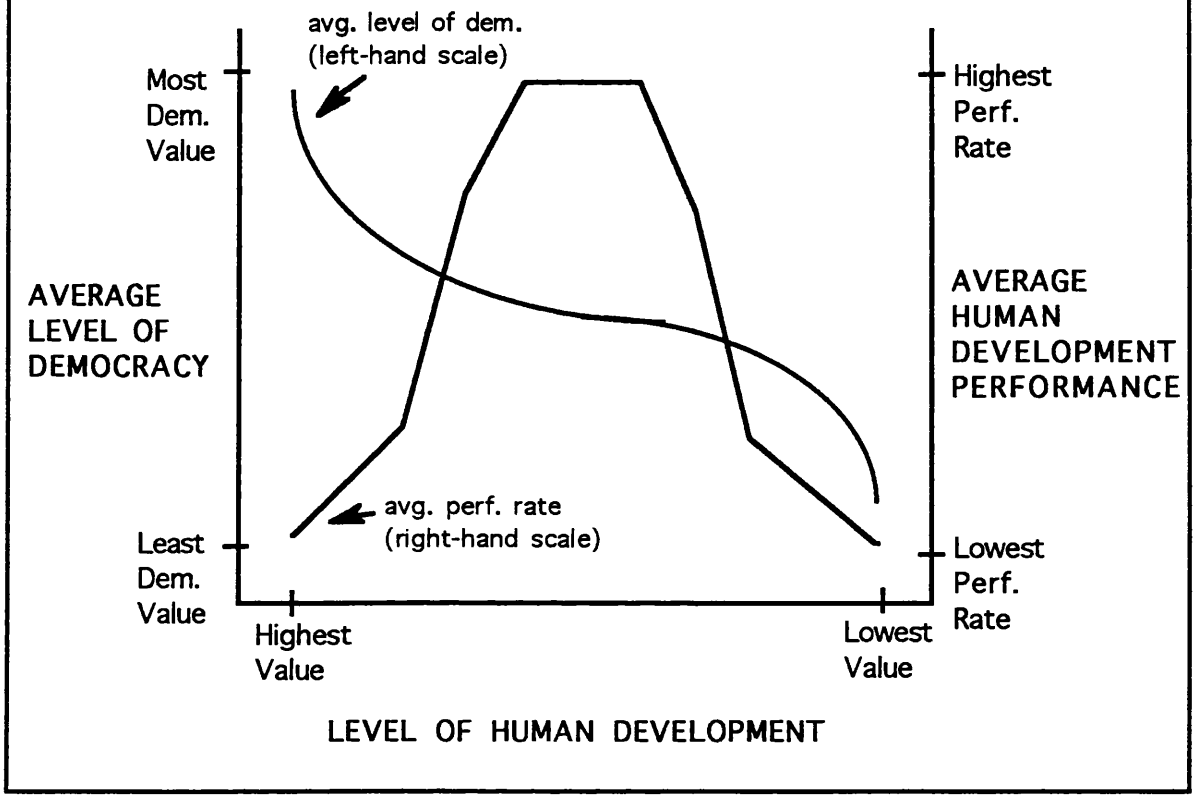
The first and most obvious indication that the relationships are altogether different may be seen in the results of the correlation analysis: the level of democracy may explain between 44-47% of the variation in I-HDI values over the period (N=123), but only between 0-3% of the variation in I-HDI performance rates.[1] Weaker findings emerge when developing states are considered in isolation (N=88), though the patterns are similar: the level of democracy may explain between 25-30% of the variation in I-HDI values, but only 0-2% of the variation in I-HDI performance rates.

Why this should be the case may be seen in Figure 8.1. In this highly generalized portrayal,[2] the common basis of comparison is the level of human development, against which average levels of democracy and average performance rates may be traced. The fact

[1]From Tables 4.1 and 5.1. Similar results were observed for the other indices as well. The level of democracy could explain between 34-40% (HDI) and 41-49% (ISC) of the variation in index levels, but only 0-5% (HDI) and 0-1% (ISC) of the variation in performance rates.

[2]The generalized patterns reflect the weight of the evidence in Chapters 4 and 5, and combine to some extent the trends observed specifically in Figures 4.1 and 5.4. The slope representing the average level of democracy in Figure 8.1 is basically similar to the ones found in Figure 4.1, except that the scale used is inverted.

Figure 8.1 Tracing Average Levels of Democracy and Average Human Development Performance Rates Across Levels of Human Development



that the most developed states (the OECD countries) are democratic whereas the least developed states (largely in sub-Saharan Africa) are not, suggests that the slope tracing the average level of democracy (left-hand scale) descends steadily across the levels of human development. The slope flattens out somewhat across the middle range of human development values, where developing states are fairly evenly represented by all levels of democracy (resulting in averages straddling the mid-range of democracy scores), and then descends further towards the lower range of human development values (where non-democratic regimes are more prevalent).

In contrast, the slope tracing average performance rates (right-hand scale) is at its lowest points at either end of the human development scale: the most developed (and democratic) states have less room for absolute growth on the fixed scale, and thus develop more incrementally, whereas the least developed (and non-democratic) states most often lack the resources (material and otherwise) for rapid development. Along the middle range of human development values, where all levels of democracy are largely represented in equal measure, countries tend to produce by far the highest absolute increases, resulting in an inverted 'U' pattern for the slope.

The dual nature of the democracy-human development relationship also becomes readily apparent when the various independent thresholds are employed for the sample of developing states. For instance, between 79-86% of developing democracies had human development *values* above the average level for all developing states, but only 35% of them surpassed the developing threshold for human development *performance rates* for 1970-90. The percentage of developing democracies with human development values above the average found for countries at similar levels of economic development stood between 71-79%, but only 24% of them surpassed their economic development threshold for performance rates. Between 60-79% of developing democracies had human development values above the average for their respective regions, but only 41% surpassed their regional threshold for performance rates.

When democratic and non-democratic states are compared directly together, the results vary according to which relationship is under review. Given the above observations, the findings are to some extent predictable, even when controlling variables are introduced: democratic states, on average, compare favourably in terms of human development levels but less favourably in terms of human development performance.

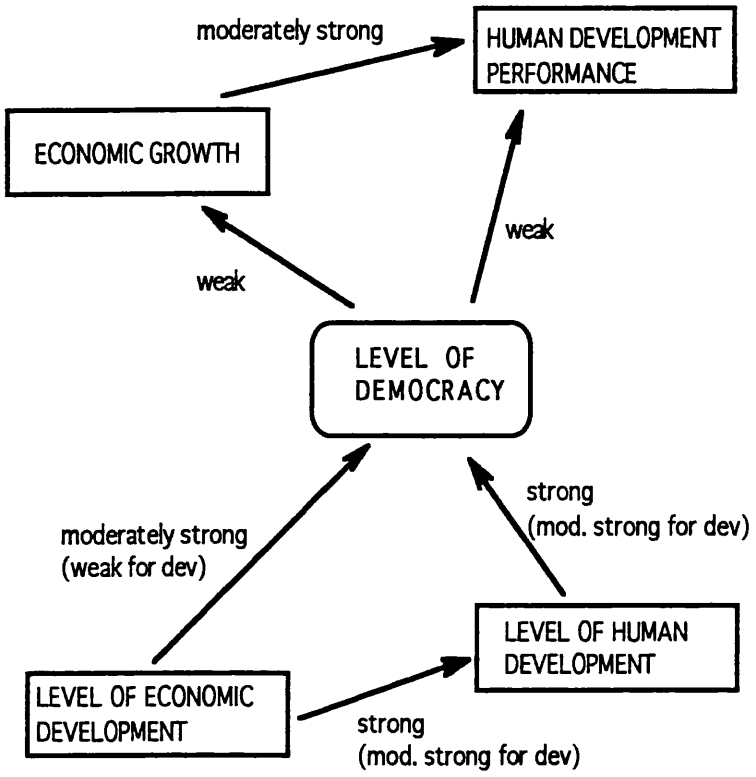
When the level of economic development is controlled for, democratic states display higher average human development values irrespective of income quartile. On the other hand, democratic states produce marginally lower average human development performance rates than non-democratic states at similar levels of economic development. There is a slight divergence from the general patterns when regional variations are controlled for: democratic states *do not* always display the highest average human development values, nor do they often display the highest average human development performance rates.

The independent thresholds may again be applied to the sample of developing states. A considerably higher percentage of democratic states surpass the average human development levels found for all developing states, countries at similar levels of economic development, and countries from the same regional group. However, with regard to these same three thresholds, a slightly higher percentage of non-democratic states produce above average human development performance rates; this is also the case when a fourth threshold, the average for countries beginning from similar human development levels, is applied.

Therefore, while democratic states are typically associated with higher levels of human development, they do not improve overall living conditions better than non-democratic states; over the course of the 1970-90 period, developing democracies performed marginally worse than the less authoritarian (LoD 3-5*) of the two non-democratic groups. Though far from perfect, the lines of causation are clearly from human development to democracy, not vice versa.

These observations may be placed into context by constructing a model of the democracy-development relationships (Figure 8.2). The bottom half of the model indicates that the level of democracy is strongly influenced by the level of human development, and

Figure 8.2 A Model of the Democracy-Development Relationships



moderately influenced by the level of economic development. But the strength of these relationships weakens noticeably when developing states are considered in isolation: the level of economic development has virtually no impact, while the level of human development exerts a more moderate impact. The level of economic development exerts a strong influence on the level of human development when all states are considered, and a moderately strong influence when developing states are considered alone.

These findings force one to reassess some of the core tenets in the literature on 'democratic preconditions'. There is virtually *no* relationship between levels of national affluence and levels of democracy in the developing world: economic development may at most explain 0.1-2% of the variation in LoD values for the 1970-90 period. To further undermine the 'wealth-equals-democracy' proposition, it will also be recalled that democratic states are not, on average, the wealthiest in the developing world. Substituting levels of human development into the equation allows one to consider another prominent argument in the literature: that democracy is more likely to take root in developing societies

where there is a greater 'equality of conditions or life chances'. This is true in a broad sense, but the evidence shows that this relationship is far from automatic: the level of human development may at most explain only 25-30% of the variation in levels of democracy in the developing world. While developing democracies did consistently produce the highest average human development values over the 1970-1990 period, the findings are to some extent skewed by the disproportionate influence exerted by Latin American democracies.

The top part of the diagram shows that the level of democracy, in turn, has an extremely weak impact on both economic growth and human development performance (for both samples). As demonstrated in Chapter 7, economic growth has a moderately strong impact on human development performance, explaining between 14-28% of the variation (21-38% for developing states); by way of comparison, the level of democracy explains only 0-3% of the variation (both samples). This would seem to indicate that if the level of democracy were to exert any influence whatsoever on human development performance, it would have to be indirectly; that is, by influencing economic growth.

However, since the level of democracy explains very little of the variation in economic growth rates (4-14% for the All States sample, 2-7% for the Developing States sample), no general relationship exists between the variables.[3] While this finding supports the Skeptical Perspective outlined in Chapter 1, the Conflict Perspective appears to be correct in one key respect: some non-democratic states generate relatively high rates of economic growth, whereas democratic states, on the whole, tend to muddle through with moderate or slow growth. Non-democratic states account for virtually all of the cases of 'rapid' economic growth (4.0%+ GNP/C). Indeed, the ability of some non-democratic states to achieve high rates of economic growth helps to explain their considerably better human development performance.

The importance of strong economic growth to overall human development progress is clear. On average, states with the highest human development gains have benefited from the highest rates of economic growth, while the worst performing states have produced the worst average rates of growth. Viewed from another perspective, of the nine states with exceptionally high absolute I-HDI increases (0.200+) over the 1970-90 period, six had rapid economic growth rates, while three had moderately strong growth (2.0-3.9%). When levels of human development at the beginning of the performance period were controlled for, states with rapid rates of economic growth produced the highest average human development gains; a point confirmed when levels of economic development were controlled for in the poorest sample of developing states.

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[3]Little separated the three levels of democracy when direct comparisons were made. For instance, the percentage of developing states from each LoD group with economic growth rates above the developing average for 1970-90 (1.3%) was similar: 53% (LoD 1-2*), 49% (LoD 3-5*), 45% (LoD 6-7). Moreover, developing democracies had only a fractionally lower average growth rate (1.2%) than did the group of non-democratic (3-5*) states (1.6%); the non-democratic (6-7) group was not far behind (1.0%).

Having ruled out the possibility of either the level of democracy or other structural variables (the structure of the economy, the size of government, and the size of governmental social expenditures) exerting any significant influence on human development performance, the fact remains that strong economic growth alone is not enough. There are cases where strong economic growth does not lead to superior human development performance, and where superior human development performance is achieved in the absence of strong economic growth. In either case, there is what the UNDP refers to as 'unbalanced links' in the developmental chain. To establish the 'strong links' which underpin the 'virtuous cycle of development', strong economic growth must be accompanied by strong human development performance. But how best to create such conditions?

Once again, the level of democracy does not provide any real clues, since it does not affect the nature of the 'links' (strong, unbalanced or weak) between economic growth and human development performance.[4] Instead, one may turn to Adrian Leftwich's proposition that developmental success is not contingent upon the level of democracy, or form of government, but on the nature and role of the state. The evidence shows quite convincingly that the most exceptional performers over the 1970-90 period were the 'developmental states' identified by Leftwich.[5] These were the *only* states which managed to combine strong and sustained economic growth with strong human development gains.

With very little in common on several key fronts (the level of democracy, the level of economic development at the beginning of the performance period, the structure of the economy, the size of government, and the size of social expenditures), developmental states share certain *political* characteristics (recall section 7.4 in Chapter 7). The extent to which countries adopt these features will largely determine how successful they will be. Under this interpretation, development must be state-guided, with plans formulated and executed by determined and competent political elites, supported by an effective, autonomous, and centralized bureaucracy.

Far from being a passive player in a process where market forces determine the nature and pace of economic growth, the state is an active participant. It is the state's responsibility to create the conditions necessary for strong and sustained economic growth. This involves not just establishing a 'favourable business climate' in the purely economic and legalistic sense, but also ensuring that governmental policies and expenditures are directed on the human development front. In addition to achieving the moral aim of empowering individuals and improving social conditions, 'human capital' expenditures ensure that the seeds are replanted for continued economic growth (via a healthier and better educated workforce, etc), the benefits of which are again reinvested into human development priorities, and so on. This reflects the essence of the UNDP's 'virtuous cycle' framework,

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[4]Over the 1970-90 period, between 6-15% of democratic states displayed 'strong links', an almost identical range found for the two groups of non-democratic states (13-22% and 8-14%; recall Fig 7.9).

[5]The developmental states identified for the 1970-90 period were: Botswana, Mauritius, Malaysia, Singapore, Hong Kong, Thailand, China, Indonesia, and South Korea (Chapter 7).

which itself is an updated version of the World Bank's 'growth with redistribution' thesis (except that the human development angle is more explicitly recognized).

The state is the most important factor in the development equation, and developmental states are overwhelmingly 'non-democratic' in character. Short-term changes in government may undermine the conditions of continuity and stability necessary for the successful implementation of development policy, which itself is largely formulated with the longer-term in mind. Moreover, the creation of a favourable climate for rapid and sustained economic growth, typically following a path of export-oriented industrialization, might require a clampdown on popular pressures in the event that developmental goals are perceived to be potentially compromised.

Consequently, where they do display the external trappings of a democratic government, developmental states are likely to be of a more 'authoritarian nature', displaying the characteristics of de facto one-party/coalition rule (Singapore, Malaysia and Botswana), although some exceptions do exist where an underlying elite consensus on development policy masks any superficial (i.e. non-development related) differences suggested by competitive elections (Mauritius). The evidence has shown that, in stark contrast to the enviable records of these 'developmental democratic states', the majority of developing democracies have managed to establish only 'weak links' between economic growth and human development performance.

8.2 Post-1990 Trends

Although it is still premature to evaluate the relative success of democratic transitions since the early 1990s, a summary of the general trends during the 1990-97 period suggests that the conclusions arrived at in this thesis, and the model derived thereof in Figure 8.2, remain intact. Owing to limited data availability, which precludes the construction of the I-HDI, the version of the HDI in the 1999 Human Development Report will suffice as a compromise human development measure.[6] Since Vanhanen does not provide ID values for this period, meaning that the Level of Democracy Index cannot be constructed, the measure of democracy employed is Gastil's Political Rights Index (PRI).[7] The post-1990 data may be found in Appendix R.

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[6]The version of the HDI constructed for the 1999 Report is based on a slightly different methodology than in previous editions (see "Technical Note: Computing the Indices" in the Report). The resulting HDI values, computed for 1997, are not therefore directly comparable to the time-series HDI data employed in this thesis (which come from the 1994 Report).

[7]The PRI values are taken from Freedom House's *Freedom in the World, 1998-99*. Like LoD values, PRI values range from 1.0 (most democratic) to 7.0 (least democratic).

Democracy is related to higher levels of human development:

•A moderately strong correlation coefficient (-0.580) is produced for the level of democracy (PRI 1998) and the level of human development (HDI 1997) for the All States sample (N=118), while a significantly weaker coefficient (-0.297) is found for the Developing States sample (N=85). The entry of so many less developed states into the democratic fold is clearly reflected in the fact that the correlations for both samples are noticeably weaker than those found over the 1970-90 period (Table 4.1).

•Average PRI values become noticeably less democratic as one descends HDI rank groups. The top 25 HDI-ranked states have a staunchly democratic average PRI value of 1.3, while the bottom-ranked states (R101-118) have an average PRI value of 4.8; the other PRI averages are 2.6 (R26-50), 3.7 (R51-75) and 4.7 (R76-100). If the averages were plotted on a graph, the slope would be similar to those produced in Figure 4.1 for 1970-90, although it would flatten out more for the bottom three HDI groups, resulting in a less linear pattern (again because of the conversion of many less developed states to democratic governance).

•Of the 69 states in the sample with more or less democratic values (PRI 1.0-3.0), 34 (or 49%) have High HDI values (0.800+), 26 (38%) have Medium Level values (0.500-0.799), and 9 (13%) have Low HDI values (below 0.499).[8] Roughly half of all democratic states therefore display High HDI values. On the other hand, the High HDI threshold is surpassed by only 3 states (or 14%) with PRI values of 4.0-5.0 (Hong Kong, Singapore and Kuwait), and only by the UAE among states with PRI values of 6.0-7.0 (3% of the group).[9]

•On average, democratic states have the highest HDI values. For the All States sample, the average HDI values by PRI group are: 0.754 (1.0-3.0), 0.619 (4.0-5.0) and 0.552 (6.0-7.0). While this rule holds for the Developing States sample, the gaps between the PRI groups are considerably less pronounced: 0.646 (1.0-3.0), 0.608 (4.0-5.0), and 0.552 (6.0-7.0).

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[8]More or less democratic PRI values are defined as those falling within the 1.0-3.0 range, as opposed to the 1.0-2.9 range on the LoD scale. There are many de facto democratic states in Latin America which Gastil has accorded PRI values of 3.0. There are some weak democracies - among them Turkey and Pakistan - which have been accorded PRI values of 4.0, and thus fall marginally outside the democratic group (given that some cut-off point was necessary). By way of comparison with the above percentages: of those 56 countries with fairly strong democratic PRI values (1.0-2.0), 32 (57%) had High HDI values, 20 (36%) had Medium Level HDI values, and 4 (7%) had Low HDI values.

[9]To complete the picture, the following breakdowns apply to the two non-democratic groups across the HDI Levels (High, Medium, Low): 3 (or 14%), 12 (57%) and 6 (29%) for countries with PRI values of 4.0-5.0; 1 (3%), 15 (54%), and 12 (43%) for countries with PRI values of 6.0-7.0.

• A strong correlation coefficient (0.721) is produced for the level of human development (HDI 1997) and the level of economic development (GDP/C 1997) for the Developing States sample (N=85), while a very weak coefficient (-0.134) is produced for the level of democracy (PRI 1998) and the level of economic development (GDP/C 1997). Very little of the variation in levels of democracy in the developing world is explained by either the level of human development (9%) or the level of economic development (2%).

•Although the two most advanced cases, Singapore and Hong Kong, do not display democratic PRI values, six of the top 10 HDI-ranked developing countries are democratic, as are thirteen of the top 20 ranked countries (Table 8.1 overleaf). The PRI values are fairly balanced at the other end of the HDI scale: of the bottom 20 ranked countries, six display democratic PRI values, six display PRI values of 4.0-5.0, and eight display PRI values of 6.0-7.0. More telling is the list of GDP/C values: eight of the top 10 HDI-ranked countries also display top 10 GDP/C ranks; and sixteen of the top 20 HDI-ranked countries also have top 20 GDP/C values (three of the four other states - Costa Rica, Libya and Thailand - barely fail to make the top 20 GDP/C list). Thirteen of the 20 least developed countries also make the list of the 20 poorest.

•When levels of economic development are controlled for, developing democracies produce the highest average human development values in three of the five cases under review. This is the case for countries with GDP/C (US$) between $9,999-5,000, $4,999-3,000, and $2,999-1,000, but not for countries located in either the wealthiest ($10,000 or more) or poorest (less than $1,000) groups.[10]

•In the developing world, the level of economic development explains much more of the variation in basic indicators such as adult literacy (25%) and life expectancy (38%) than does the level of democracy (8% of the variation in each).[11]

[10]The average HDI values for each PRI group (1.0-3.0, 4.0-5.0, 6.0-7.0) are: 0.845, 0.870 and 0.776 ($10,000+); 0.760, 0.701, and 0.722 ($9,999-5,000); 0.714, 0.691 and 0.668 ($4,999-3,000); 0.555, 0.459 and 0.472 ($2,999-$1,000); 0.364, 0.426 and 0.391 (less than $1,000).

[11]The correlation coefficients found (N=58) are: 0.502 (GDP/C with Lit 1998), 0.613 (GDP/C with Life Exp 1998), -0.278 (PRI 1998 with Lit 1998), and -0.279 (PRI 1998 with Life Exp 1998).

Table 8.1 Democracy and Levels of Human Development (HDI), Developing States (c1997)

HDI Rank	Country	HDI 1997	PRI 1998	GDP/C 1997	GDP/C Rank	HDI Rank	Country	HDI 1997	PRI 1998	GDP/C 1997	GDP/C Rank
1	Singapore	0.888	5.0	28460	1	43	Egypt	0.616	6.0	3050	43
2	Hong Kong	0.888	4.0	24350	3	44	Nicaragua	0.616	2.0	1997	50
3	Barbados	0.857	1.0	12001	7	45	Botswana	0.609	2.0	7690	15
4	Korea, S.	0.852	2.0	13590	5	46	Gabon	0.607	5.0	7550	16
5	Chile	0.844	3.0	12730	6	47	Iraq	0.586	7.0	3197	40
6	Kuwait	0.833	5.0	25314	2	48	Morocco	0.582	5.0	3310	38
7	Argentina	0.827	3.0	10300	8	49	Lesotho	0.582	4.0	1860	53
8	Uruguay	0.826	1.0	9200	11	50	Myanmar	0.580	7.0	1199	67
9	U.A.E	0.812	6.0	19115	4	51	PapuaN.G.	0.570	2.0	2654	46
10	Costa Rica	0.801	1.0	6650	23	52	Zimbabwe	0.560	5.0	2350	48
11	Trinidad&T.	0.797	1.0	6840	19	53	India	0.545	2.0	1670	56
12	Venezuela	0.792	2.0	8860	12	54	Ghana	0.544	3.0	1640	57
13	Panama	0.791	2.0	7168	18	55	Cameroon	0.536	7.0	1890	51
14	Mexico	0.786	3.0	8370	13	56	Congo	0.533	7.0	1620	58
15	Malaysia	0.768	5.0	8140	14	57	Kenya	0.519	6.0	1190	68
16	Colombia	0.768	3.0	6810	20	58	Pakistan	0.508	4.0	1560	59
17	Cuba	0.765	7.0	3100	42	59	Zaire	0.479	7.0	880	77
18	Mauritius	0.764	1.0	9310	10	60	Sudan	0.475	7.0	1560	60
19	Libya	0.756	7.0	6697	21	61	Togo	0.469	6.0	1490	61
20	Thailand	0.753	2.0	6690	22	62	Nepal	0.463	3.0	1090	70
21	Ecuador	0.747	2.0	4940	28	63	Nigeria	0.456	6.0	920	76
22	Saudi Arabia	0.740	7.0	10120	9	64	Madagascar	0.453	2.0	930	75
23	Philippines	0.740	2.0	3520	34	65	Bangladesh	0.440	2.0	1050	71
24	Brazil	0.739	3.0	6480	24	66	Zambia	0.431	5.0	960	74
25	Peru	0.739	5.0	4680	30	67	Haiti	0.430	5.0	1270	65
26	Jamaica	0.734	2.0	3440	37	68	Senegal	0.426	4.0	1730	55
27	Paraguay	0.730	4.0	3980	33	69	Ivory Coast	0.422	6.0	1840	54
28	Turkey	0.728	4.0	6350	25	70	Benin	0.421	2.0	1270	66
29	DominRep.	0.726	2.0	4820	29	71	Tanzania	0.421	5.0	580	84
30	Sri Lanka	0.721	3.0	2490	47	72	Uganda	0.404	4.0	1160	69
31	Iran	0.715	6.0	5817	26	73	Malawi	0.399	2.0	710	81
32	Jordan	0.715	4.0	3450	36	74	Guinea	0.398	6.0	1880	52
33	China	0.701	7.0	3130	41	75	Angola	0.398	6.0	1430	63
34	South Africa	0.695	1.0	7380	17	76	Chad	0.393	6.0	970	73
35	Tunisia	0.695	6.0	5300	27	77	Gambia	0.391	7.0	1470	62
36	Indonesia	0.681	6.0	3490	35	78	Rwanda	0.379	7.0	660	82
37	El Salvador	0.674	2.0	2880	44	79	CenAfrRep.	0.378	3.0	1330	64
38	Algeria	0.665	6.0	4460	31	80	Mali	0.375	3.0	740	79
39	Syria	0.663	7.0	3250	39	81	Mozambique	0.341	3.0	740	80
40	Bolivia	0.652	1.0	2880	45	82	Burundi	0.341	7.0	630	83
41	Honduras	0.641	2.0	2220	49	83	Burkina F.	0.304	5.0	1010	72
42	Guatemala	0.624	3.0	4100	32	84	Niger	0.298	7.0	850	78
						85	Sierra Leone	0.254	3.0	410	85

•As was found for the 1970-90 period, democratic states in the developing world are not, on average, the wealthiest: the average 1997 GDP/C values per PRI group are $4,937 (1.0-3.0), $6740 (4.0-5.0), and $3,257 (6.0-7.0). Developing democracies do, however, show the highest average literacy rate (74.4%, compared to 70.5% and 62.5% for the non-democratic groups), and the highest average life expectancy rate (64.0 years, compared to 60.1 years and 57.8 years for the non-democratic groups).

Democracy has no impact on human development performance in the developing world:

•An extremely weak correlation coefficient (-0.174) is found for human development performance (HDI shortfall reduction rate for 1990-97) and the level of democracy (PRI average 1990-98) for the Developing States sample (N=58),[12] whereas a moderately strong coefficient (0.512) is found for human development performance and economic growth (GDP).[13] Thus, of the variation in human development rates, the rate of economic growth may at most explain 26%, the level of democracy only 3%. Nor does the level of democracy account for much of the variation in economic growth rates (7%). These findings are consistent with those for the 1970-90 period (Tables 5.1, 7.1 and 7.8).

•As was found for the 1970-90 period (Figure 5.1), when average levels of democracy are computed for each group of performing states, no patterns emerge as one moves from the best to the worst groups. The values fluctuate very little (3.3-5.4) along the mid-range on the PRI scale. The ten states with the highest HDI shortfall reduction rates (R1-10) display an average PRI value of 4.1, compared to similar average values of 3.3 (R11-20), 3.9 (R21-30), 4.3 (R31-40), and 5.4 (R41-54).

•Four of the top 10 HDI performing states, and exactly half of the top 20 performers, exhibit more or less democratic period values (PRI 1.0-3.9) (Table 8.2 below). Only four democratic states (Senegal, Venezuela, South Africa and Botswana) appear among the bottom 20 performing states. Seven of the top 10 HDI performers also display top 10 GDP growth rates. Indeed, the three fastest growing states - China (11.1%), Singapore (8.0%) and Malaysia (7.7%) - are ranked third, first and fourth in terms of HDI shortfall reduction rates.

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[12]The method for calculating shortfall reduction rates was given in Chapter 7. The actual HDI rates come directly from the UNDP (1999). A country's PRI period average has been calculated by simply adding the PRI values for the two end dates (c1990 and 1998) and then dividing by two.

[13]Since *per capita* GDP growth rates were unavailable for the 1990-97 period, aggregate GDP growth rates (1990-98) have been used instead (from The World Bank's *World Development Report 1999-2000*).

Table 8.2 Democracy and Human Development Performance (HDI), Developing States (1990-97)

HDI Perf Rank	Country	HDI Shortf. 90-97	PRI Avg 90-98	GDP Growth 90-98	GDP Growth Rank	HDI Perf Rank	Country	HDI Shortf. 90-97	PRI Avg 90-98	GDP Growth 90-98	GDP Growth Rank
1	Singapore	32.5	4.5	8.0	2	28	Ecuador	7.6	2.0	2.9	37
2	Korea, S.	24.6	2.0	6.2	7	29	Algeria	7.5	5.7	1.2	49
3	China	20.7	6.9	11.1	1	30	Benin	7.2	4.4	4.6	18
4	Malaysia	17.7	4.9	7.7	3	31	Guinea	7.0	6.4	5.0	14
5	Hong Kong	15.2	4.0	4.4	20	32	Bangladesh	6.8	3.2	4.8	16
6	Tunisia	15.2	5.7	4.4	21	33	Honduras	6.4	2.0	3.6	31
7	Indonesia	13.8	5.7	5.8	9	34	Uganda	6.4	4.9	7.4	5
8	Thailand	12.9	2.2	7.4	4	35	Nigeria	6.3	5.7	2.6	39
9	Peru	12.2	3.7	5.9	8	36	Senegal	5.6	3.8	3.0	36
10	Argentina	12.1	2.2	5.3	12	37	Venezuela	5.2	1.5	2.0	43
11	Uruguay	11.7	1.2	3.9	27	38	Malawi	5.1	4.4	3.9	28
12	Saudi Arabia	11.1	6.9	1.6	46	39	Chad	4.4	6.4	4.6	19
13	Brazil	10.7	2.5	3.3	34	40	Lesotho	2.9	5.0	7.2	6
14	DominiRep.	10.7	1.7	5.5	11	41	Togo	2.4	6.0	2.3	40
15	Bolivia	10.6	1.5	4.2	22	42	Burkina F.	2.1	5.7	3.5	32
16	Egypt	10.2	5.5	4.2	23	43	Niger	2.1	6.9	1.9	45
17	Philippines	10.1	2.2	3.3	35	44	Mozambique	1.1	4.5	5.7	10
18	Pakistan	9.6	3.7	4.1	26	45	Ivory Coast	1.0	6.0	3.5	33
19	Morocco	9.2	4.5	2.1	42	46	Cameroon	0.6	6.5	0.6	52
20	Sri Lanka	8.9	3.3	5.3	13	47	Congo	0.3	6.9	1.0	50
21	Guatemala	8.8	3.0	4.2	24	48	CenAfrRep.	-1.0	4.5	1.5	48
22	Nepal	8.8	3.3	4.8	15	49	South Africa	-1.8	3.2	1.6	47
23	Rwanda	8.5	6.5	-3.3	54	50	Burundi	-3.0	7.0	-3.2	53
24	Mali	8.3	4.5	3.7	29	51	Kenya	-5.4	6.0	2.2	41
25	Costa Rica	8.2	1.0	3.7	30	52	Zambia	-5.4	5.5	1.0	51
26	Paraguay	8.0	4.4	2.8	38	53	Zimbabwe	-12.6	5.5	2.0	44
27	Ghana	7.9	4.5	4.2	25	54	Botswana	-18.5	1.7	4.8	17

•When one controls for similar levels of human development at the beginning of the period, no consistent patterns emerge. At the High HDI Level, the three democratic states (Uruguay, Argentina, South Korea) produced a lower average HDI shortfall reduction rate (16.1%) than the two states (Hong Kong and Singapore) with PRI values in the 4.0-5.9 range (23.9%). At the Medium HDI Level, the fourteen democratic states produced a marginally lower average reduction rate (6.6%) than the ten states with PRI values of 4.0-5.9 (8.0%); an average rate of 5.5% was found for the five states with PRI values of 6.0-7.0. At the Low HDI Level, the four democratic states (Bangladesh, Nepal, Pakistan and Senegal) produced a better average reduction rate (7.7%) than either of the two non-democratic groups (3.3% and 3.2%).

•Confirming the importance of strong economic growth to human development performance, the ten countries with the best HDI shortfall reduction rates (R1-10) displayed an average GDP growth rate of 6.6%, compared to an average growth rate of only 2.0% for the worst performing HDI group (R41-54). Curiously, however, and to illustrate that the relationship between the variables is not automatic: the second-best performing HDI group (R11-20) had a lower average GDP growth rate (3.8%) than the second-worst performing HDI group (R31-40)(4.4%); the lowest average growth rate (2.9%) was found for the middle HDI performers (R21-30).

•The developmental states identified for the 1970-90 period continued to perform very well after 1990. Of the eight in the sample (missing data excluded Mauritius): Singapore, South Korea, China, Malaysia and Hong Kong comprise the top 5 HDI performers, while Indonesia and Thailand are ranked 7th and 8th; the fact that Botswana actually showed the worst HDI rate (-18.5%) is almost entirely attributable to the dramatic decline in the country's life expectancy rates caused by the Aids epidemic (see UNDP 1999). Six of the eight cases are ranked in the top 10 in terms of GDP growth, of which China, Malaysia and Singapore occupy the top three places; Botswana and Hong Kong are ranked 17th and 20th. All eight developmental states produced GDP growth above 4% for 1990-98.

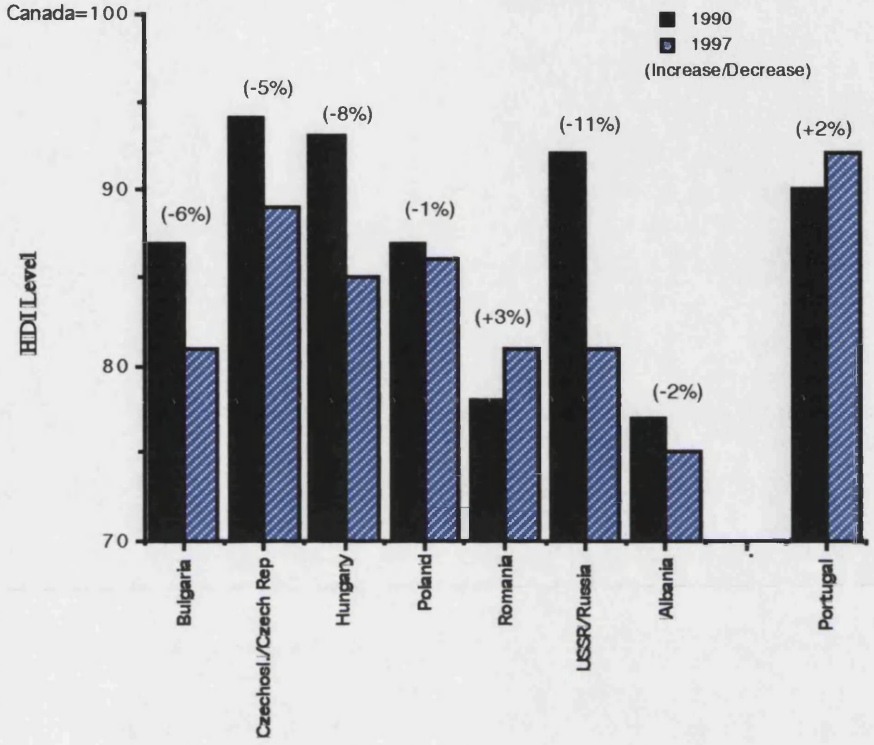
A Glance at the Changes in the Former Communist States

Evaluated solely on the basis of the changes observed in their respective human development (HDI) levels between 1990 and 1997, the initial period of democratic rule in the former Communist states has not been particularly easy. Figure 8.3 depicts the changes in HDI levels for seven states and, for additional reference, Portugal.[14] Relative to where they stood at the time of the 1989-91 democratic transitions, most of these countries were worse off in terms of individual capabilities, as captured by the HDI. Russia experienced the most pronounced decline, while Romania showed a very slight increase.[15] In 1990, Czechoslovakia, Hungary and the USSR all had higher HDI values than Portugal, the

[14] Given that the HDI values for 1990 and 1997 are not strictly comparable, since they were constructed using slightly different methodologies (see the 1994 and 1999 Human Development Reports), the values for each state have been converted as a percentage of Canada's HDI value (Canada is the comparative standard as it had the highest HDI values for 1990 and 1997 in both Reports). The values for the former Czechoslovakia are related to those for the Czech Republic (i.e., excluding Slovakia), and those for the former USSR are related to those for Russia (i.e., excluding the other former Soviet republics).

[15] The 1999 Report provides the HDI Shortfall Reduction Rates for the 1990-97 period: 2.8% for Romania, -0.9% for Albania, -8.5% for Bulgaria, and -18.5% for Russia (the negative rates indicate that the shortfall levels for these states actually increased). Though well short of Portugal's HDI shortfall reduction rate of 23.3%, Poland's rate of 10% is relatively decent, and is in contrast to the apparent HDI decrease depicted in Figure 8.3 (which uses a different comparative methodology). HDI shortfall reduction rates were unavailable for Hungary and the Czech Republic.

Fig. 8.3 Changes In Human Development (HDI) Levels, 1990-97: Former Communist States and Portugal



poorest and least developed of the democracies in the sample of Industrial states. This situation, however, changed dramatically in less than a decade, with Portugal posting by far the highest HDI value in 1997 (note in particular the position of Russia). Only the Czech Republic managed to remain somewhat within distance, followed by Poland and Hungary.

In terms of economic growth, the picture looked dire for all but Poland, which produced a GDP growth rate of 4.5% for 1990-98 (this was actually higher than Portugal's rate of 2.3%). Albania showed a very modest increase of 1.8%, while the other states had negative rates: -0.2% for both Hungary and the Czech Republic, -0.6% for Romania, -3.3% for Bulgaria, and -7.0% for Russia. Combined with their poor human development profiles, Albania, Romania, Bulgaria and Russia have the furthest to go in improving the lives of their citizens.

8.3 Final Thoughts: The Politics of Human Development

Fortunate are those countries which score highly on a human development measure such as the I-HDI. They are most often democratic, although this is not entirely the case in the developing world. And fortunate are those developing countries which have managed to dramatically improve human development conditions in a short period of time, usually on the heels of strong economic growth. They have, on the whole, not been particularly democratic.

A country's degree of 'fortune' is thus determined by the quality of life enjoyed by its citizens, and by the magnitude and pace of human development progress. Human development is the ultimate litmus test. This argument is the single, overriding theoretical contribution of the humanist approach to comparative political analysis.

Like all forms of government, democracy has an instrumental role to play which is quite independent of any intrinsic value it may hold for societies at different stages of development and with different cultural traditions. Democracy is certainly the most preferable form of government when human development conditions are found to be more or less equal between cases. If two countries, one democratic and one non-democratic, are at similar levels of human development, it would be absurd not to recognize that the former provides intrinsic benefits which the latter does not. Likewise, if these same two countries share similar rates of human development progress, the democratic state should be applauded for improving conditions within a more open and humane political framework.

But the intrinsic value of democracy, though considerable, should not mask ineffectual results. For instance, democratic India has been a miserable failure on the human development front. The extent of this failure is perhaps most apparent when contrasted with the noticeably better record of China (Figure 8.4), another populous and underdeveloped country which began its period under Communist rule at roughly the same time that India gained its independence. Judging by the human development evidence, no one may reasonably claim that people in India are somehow 'better off' than their counterparts in China simply because they have the right to vote.[16] For ordinary Indians, this symbolically powerful right has not been translated into significant human development gains.

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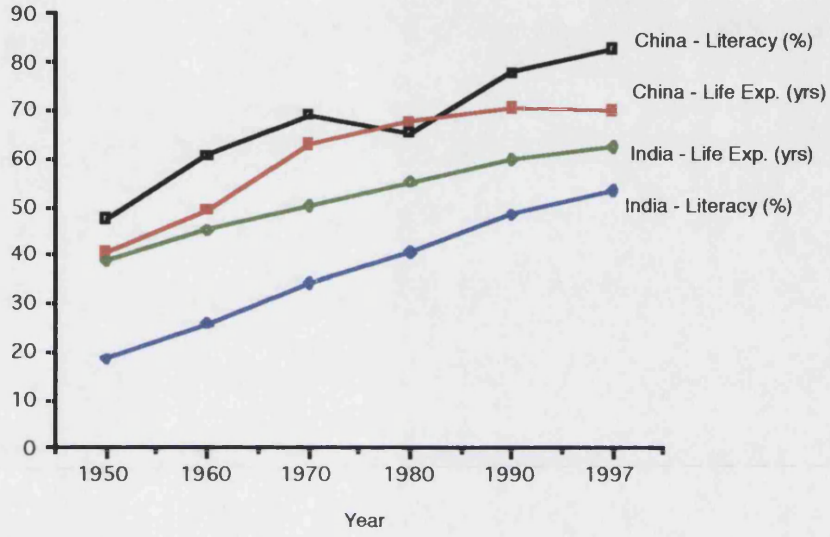
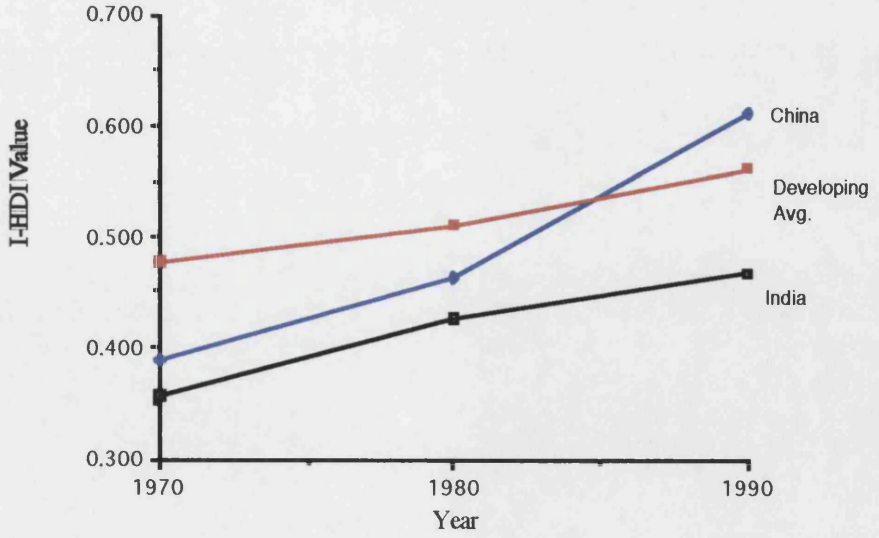
[16]Dreze and Sen (1990) would counter this argument by pointing to the past and claiming that some of the more catastrophic mistakes made by totalitarian regimes, which have resulted in the loss of countless lives, would not have been replicated by democratic regimes. Looking at the pairing of India and China, they argue that Mao's Great Leap Forward experiment, which produced widespread famine resulting in millions of Chinese lives, could not have been implemented in India. Regardless of the merits of this specific point, it is hard to ignore the fact that considerably more Indian than Chinese lives are lost every year due to poor health, sanitation, and hunger, as reflected by India's comparatively dismal infant mortality and child survival rates. Tracing the figures back to the 1950s, one would likely find that several million more Indian lives have been lost in this manner. Moreover, playing the populist and nationalist cards, successive Indian governments have involved the country in wars with Pakistan, with enormous fatalities on both sides. Nonetheless, had the data been available to construct the I-HDI for the period in question (1950s/1960s), China's I-HDI value would reflect the cost of Mao's virtually unprecedented folly (through dramatically lower rates for several constituent indicators), just as India's I-HDI value would reflect the cost of its various conflicts and its persistent poverty (through decreases in several constituent indicator rates).

Figure 8.4 The Human Development Records of China and India in Comparative Perspective

(a) Adult Literacy and Life Expectancy, 1950-1997

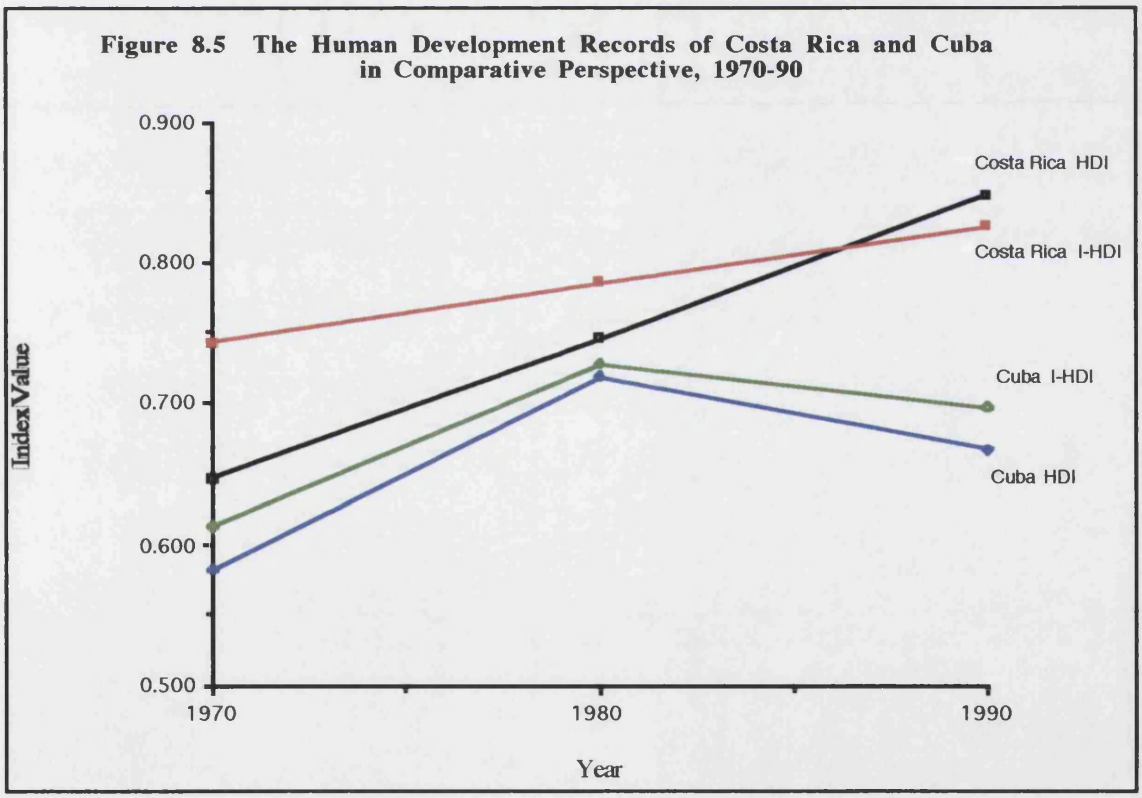


(b) Changes In I-HDI Levels, 1970-90



On the other hand, despite some notable achievements by Cuba since its Revolution, especially in the health and education sectors, its overall human development record does not compare favourably against that of another small (but democratic) country, Costa Rica (Figure 8.5). Both countries were found at roughly similar income levels in 1970 (INC 2, or GDP/C of $701 for Cuba and $569 for Costa Rica), and yet their records differed tremendously: the HDI and I-HDI values for Costa Rica were noticeably higher than Cuba's values for each given date. And while Costa Rica continued to make steady progress throughout the period, conditions in Cuba deteriorated between 1980 and 1990. There is no question that people in Costa Rica enjoyed substantially better living conditions by 1990. That they also enjoyed (and continue to enjoy) political freedoms only complemented their achievements on the human development front. Cubans have much less to celebrate.[17]

Figure 8.5 The Human Development Records of Costa Rica and Cuba in Comparative Perspective, 1970-90



[17] Admittedly, Cuba is a curious case. Its economy was (and is) heavily influenced by the U.S. embargo and, in turn, the subsidies (credit and other) it formerly received from the USSR. Whatever one's own views on the subject, it may be argued that a significant change in the present status quo is necessary in order to improve economic conditions and bring about increased human development dividends: foreign investment will flow to the island, and its participation in the global economic system will be strengthened, when either the embargo is lifted, or when Cuba finally does become democratic. That the economic component is central to the above comparisons may be observed in the fact that Cuba and Costa Rica shared almost identical adult literacy rates (94.0% and 92.8%) and life expectancy rates (75.6 yrs and 76.0 yrs) in 1990.

With Cold War rivalries over, and primarily in response to the external pressure exerted by the international donor community and many Western governments, an ever increasing number of developing states are turning to democratic forms of government. If current trends continue, it is entirely possible that democratic states will become the norm in the developing world within the next few decades, *irrespective* of levels of development and indigenous political cultures.[18] Writers on 'democratic preconditions' may have to reconsider some long-held assumptions since this phenomenon, supported by the findings in this thesis, suggests that 'structural' factors may be largely sidelined: what will most likely determine and shape democratic transitions are the *conscious strategies* of both 'internal actors' (political elites, democratic movements) and 'external actors' (the international donor community, Western governments).

A key question which then arises for political scientists to tackle concerns the second aspect of the democracy-human development equation: Once established, just how will the new democracies perform? Again, while the current wave of democratization is highly desirable, it should not lead to a confusion of ends and means. For while the mere acceptance of democratic structures invariably leads to an immediate improvement in certain areas (civil/human rights), and thus *automatically* increases the overall level of human development,[19] there must be a continuous and noticeable improvement in other fundamental areas (socio-economic conditions, general welfare, etc) if democracy is to fully demonstrate its instrumental worth. Otherwise, underdeveloped societies will either be destined to a long and uncertain march on the path towards development, or they may again fall prey to despots promising full stomachs and a brighter future. Democracy, in short, must deliver the human development goods.

So far, developing democracies have not done too badly, performing largely on par with - or, in some cases, only marginally worse than - non-democratic states in similar circumstances (levels of human and economic development). While this refutes the currently popular view that democracy is a necessary precondition for human development progress, there is some comfort to be drawn from the argument that, since non-democratic regimes cannot be justified on the basis of vastly superior performance rates anyway,

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[18]Even certain key indicators usually associated with democratic 'potential' have lost whatever explanatory value they may have once had: in my post-1990 sample of developing states, levels of literacy and life expectancy may each explain, at most, only 8% of the variation in the incidence of democracy. This is partly a reflection of how poorly several newly-democratized countries, none of which have what might be called a 'democratic tradition', score in terms of these social indicators. In six cases, less than half of the adult population is literate (c1997): Madagascar (47%); Central African Republic (42%); Mozambique (41%); Mali (36%); Benin (34%); and Sierra Leone (33%). Of these, four have life expectancy rates below 50 years: Mozambique (45 yrs); Central African Republic (45 yrs); Malawi (39 yrs); and Sierra Leone (37 yrs). Furthermore, in terms of national income, four have GDP/C rates ($US, PPP) below $1000: Mali ($740); Mozambique ($740); Malawi ($710); and Sierra Leone ($410).

[19]This may be illustrated with reference to the I-HDI. Since the establishment or restoration of basic civil/human rights invariably follows a transition to democratic rule, a country's CIVIL value will improve accordingly, thereby increasing, in order, its Liberty Index (LIB) value, its Index of Social Conditions (ISC) value and, finally, its I-HDI value.

democratic forms and practices should be advocated unreservedly in their own right. This becomes even more imperative given that the vast majority of states, whether democratic or not, will likely end up developing in small increments. This being the case, as Leftwich would argue, it is better to have a non-developmental *democratic* state than a non-developmental *non-democratic* state. If democracy cannot demonstrate its instrumental worth, at least it may have the opportunity to display its intrinsic value.

If, however, substantial progress is to be made within a relatively short space of time, history tells us that the odds are not in democracy's favour. Indeed, whether or not one chooses to describe Singapore, Malaysia and Botswana, all of which have achieved the 'virtuous cycle' of development, as *democratic* developmental states,[20] the fact remains that these three bear little resemblance to the truly competitive multi-party systems advocated by the international community for the newly-democratized states.

It is still too early to judge whether post-1990 trends will confirm the prediction that a country must abandon genuinely democratic structures and procedures if it is to adopt the political features of a 'developmental state'. But there are encouraging signs of another kind: two formerly non-democratic developmental states, Thailand and South Korea, have since the late 1980s continued their successful policies under democratic forms of government.[21] The suggestion here is that, once they have attained sufficiently high levels of development, non-democratic developmental states may make the transition to democratic rule without slowing their rates of human development progress and economic growth.

Nevertheless, the reality is that developmental success cannot be made to order. The unpredictable journey from lower to higher levels of development might be more bearable and humane under democratic governance, but it is not shorter. The quality of the political leadership and the role of the state are more significant factors than the nature of the political system, and results breed legitimacy when human development is the objective. In this sense, politics matters, democracy does not.

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[20]If there is little or no realistic chance, given the lack of a 'level political playing-field', that the long-serving and entrenched ruling party/coalition - the PAP in Singapore, the National Front in Malaysia, and the BDP in Botswana - can actually lose an election, just how 'democratic' can these societies really be? Of course, as Leftwich suggests, such distinctions are relative (Chapter 7).

[21]South Korea had the second-best HDI shortfall reduction rate over the 1990-97 period (24.6%) among the developing states in my sample, while Thailand came in eighth (12.9%). Both had high GDP growth rates (1990-98) of 6.2% and 7.4%, respectively.

Technical Note 1: The Level of Democracy Index (LoD)

My chosen measure of democracy, the Level of Democracy Index (LoD), combines Gastil's Political Rights Index (PRI) and a scaled version of Vanhanen's Index of Democratization (ID). The following formula is used:

$$\textbf{LoD} = (\ \textbf{PRI} + \textbf{ID (scaled)}\ ) / 2$$

A country's LoD value equals the sum of its PRI value plus its scaled ID value, divided by two (the PRI value and ID value are weighted equally). The complete list of LoD values is given in Appendix B.

Like Gastil's PRI, the LoD employs a seven point scale (with 1.0 the highest or most democratic value, and 7.0 the least democratic value). Its construction is based on a two-step procedure:

Step 1.

To ensure compatibility with Gastil's PRI, Vanhanen's ID values (raw) are first scaled into a seven-point format according to the conversion table below:

ID (Raw)=	17.00 +	16.99/ 6.00	5.99/ 4.00	3.99/ 1.50	1.49/ 0.20	0.19/ 0.01	0.00
ID (Scaled)=	1.0	2.0	3.0	4.0	5.0	6.0	7.0

These conversion rates were selected because of two factors. First, Vanhanen's own "minimum threshold for democracy" stands at 5.00 ID index points (Vanhanen 1990: 33). Accordingly, this was roughly set as the 'grey area' between democracies and semi-democracies in the conversion table, so that any raw ID value of 6.00 or more is accorded a clearly 'democratic value' of either 1.0 or 2.0 (in Gastil's index, democracies are also clearly designated as having a PRI value of 1.0 or 2.0). Likewise, countries with raw ID values between 5.99 and 0.00 are considered to be non-democratic and may have scaled ID values ranging from 3.0 to 7.0 (the least democratic/ most authoritarian value). Second there was the need to maintain a fairly consistent distribution of countries by level of democracy (the corresponding PRI values for each period were consulted as a general guide). The table below shows the distribution of countries by (scaled) ID values for three periods:

	ID VALUES (Scaled)						
	1.0	2.0	3.0	4.0	5.0	6.0	7.0
N(1960/9)	22	15	7	14	18	8	23
N(1970/9)	22	11	2	13	20	5	35
N(1980/8)	33	23	6	8	9	5	39
where N per period = 107 countries (1960/9), 108 (1970/9), 123 (1980/8)							

Step 2.

Once a country's ID value has been scaled, it is then combined with its PRI value for the corresponding date/period and then divided by 2 to obtain its LoD value. Take the cases of Greece and Colombia (c1970):

Greece:

(Step 1) ID (1960/9)= 13.4 ---> ID (scaled)=2.0
since PRI (1972)= 6.0, then
(Step 2) LoD= (2.0 + 6.0) / 2 = 4.0

Colombia:

(Step 1) ID (1960/9)= 5.0 --> ID (scaled)=3.0
since PRI (1972)= 2.0
(Step 2) LoD= (2.0 + 3.0) / 2 = 2.5

Point and Period Measurement

Whereas Gastil presents PRI values on an annual basis, Vanhanen presents his ID values as decade averages (but annually for 1980/88). Since we are dealing with time-series figures of a slightly different nature, adjustments have to be made.

When calculating LoD values for a given date (1970, 1980 or 1990), Vanhanen's ID (scaled) values are taken for the preceding decade, whereas Gastil's PRI values are taken either for 1972 (the first date for which Gastil provides PRI values) or as a three-year average (PRI avg. 1979-81 for 1980, PRI avg. 1989-91 for 1990). The details are provided below:

LoD 1970 = (PRI 1972 + ID(S) 1960/9) / 2
LoD 1980 = (PRI 1979/81 avg. + ID(S) 1970/9) / 2
LoD 1990 = (PRI 1989/91 avg. + ID(S) 1980/8 avg.) / 2

When calculating LoD averages for a given period (1970/80, 1980/90 or 1970/90), Gastil's annual averages for the period in question are added to Vanhanen's corresponding ID period values as follows:

LoD 1970/80 = (PRI 1972/79 avg. + ID 1970/9) / 2
LoD 1980/90 = (PRI 1980/91 avg. + ID 1980/8) /2
LoD 1970/90 = (PRI 1972/91 avg. + (ID 1970/9+1980/8 avg. /2)) / 2

Special Cases

There are 16 countries in my sample for which Vanhanen does not provide complete ID values for the 1970/90 period: Barbados, Iceland, Luxembourg, Malta, Cyprus, Gabon, Mauritius, Singapore, United Arab Emirates, Angola, Bangladesh, Gambia, Mozambique, Papua New Guinea, Zimbabwe and Hong Kong (which is treated as an 'independent state' for the purposes of this research). To compensate, the PRI values and averages for these special cases are taken as their LoD values:

LoD 1970 = PRI 1972
LoD 1980 = (PRI 1979/81 avg. + PRI 1972/9 avg.) / 2
LoD 1990 = (PRI 1989/91 avg. + PRI 1980/91 avg.) / 2

LoD 1970/80 = PRI 1972/9 avg.
LoD 1980/90 = PRI 1980/91 avg.
LoD 1970/90 = PRI 1972/91 avg.

PRI averages are therefore substituted for the missing ID period values wherever possible to maintain the balance between point and period measurement which the LoD seeks to achieve (as indicated in the scaling measures above). For instance, whereas for the majority of cases (where ID values are available) LoD 1980 is typically calculated as:

LoD 1980 = (PRI 1979/81 avg. + ID(S) 1970/9) / 2

for special cases it is calculated as:

LoD 1980 = (PRI 1979/81 avg. + PRI 1972/9 avg.) / 2

Correlations

The correlations produced between the four measures - PRI, ID 'raw' (ID(R)), ID scaled (ID(S)), and LoD - are given in the table below for all the countries in my sample (N=123).

TABLE N1.1 Correlations Involving the LoD and its Constituent Indices

I. Point Measurement Correlations				II. Period Measurement Correlations			
	PRI	ID(R)	ID(S)		PRI	ID(R)	ID(S)
ID(R)-70	-.776(a)			ID(R)-70/80	-.874(a)		
ID(R)-80	-.787(b)			ID(R)-80/90	-.868(b)		
ID(R)-90	-.831(c)			ID(R)-70/90	-.876(c)		
ID(S)-70	.764(d)	-.885(j)		ID(S)-70/80	.928(d)	-.884(j)	
ID(S)-80	.802(e)	-.844(k)		ID(S)-80/90	.900(e)	-.841(k)	
ID(S)-90	.879(f)	-.841(l)		ID(S)-70/90	.925(f)	-.851(l)	
LoD-70	.932(g)	-.888(m)	.946(p)	LoD-70/80	.978(g)	-.896(m)	.985(p)
LoD-80	.940(h)	-.844(n)	.958(q)	LoD-80/90	.969(h)	-.875(n)	.980(q)
LoD-90	.964(i)	-.863(o)	.974(r)	LoD-70/90	.977(i)	-.879(o)	.985(r)

Notes:

(a) PRI-1972 with ID(R)-1960/9
(b) PRI-1979/81 avg with ID(R)-1970/9
(c) PRI-1989/91 avg with ID(R)-1980/8
(d) PRI-1972 with ID(S)-1960/9
(e) PRI-1979/81 avg with ID(S)-1970/9
(f) PRI-1989/91 avg with ID(S)-1980/8
(g) PRI-1972 with LoD-1970
(h) PRI-1979/81 avg with LoD-1980
(i) PRI-1989/91 avg with LoD-1990
(j) ID(R)-1960/9 with ID(S)-1960/9
(k) ID(R)-1970/9 with ID(S)-1970/9
(l) ID(R)-1980/8 with ID(S)-1980/8
(m) ID(R)-1960/9 with LoD-1970
(n) ID(R)-1970/9 with LoD-1980
(o) ID(R)-1980/8 with LoD-1990
(p) ID(S)-1960/9 with LoD-1970
(q) ID(S)-1970/9 with LoD-1980
(r) ID(S)-1980/8 with LoD-1990

Notes:

(a) PRI-1972/9 avg with ID(R)-1970/9
(b) PRI-1980/91 avg with ID(R)-1980/8
(c) PRI-1972/91 avg w/ ID(R)-1970/88 avg
(d) PRI-1972/9 avg with ID(S)-1970/9
(e) PRI-1980/91 avg with ID(S)-1980/8
(f) PRI-1972/91 avg w/ ID(S)-1970/88 avg
(g) PRI-1972/9 with LoD-1970/80
(h) PRI-1980/91 avg with LoD-1980/90
(i) PRI-1972/91 avg with LoD-1970/90
(j) ID(R)-1970/9 with ID(S)-1970/9
(k) ID(R)-1980/8 with ID(S)-1980/8
(l) ID(R)-1970/90 avg w/ ID(S)-1970/90 avg
(m) ID(R)-1970/9 with LoD-1970/80
(n) ID(R)-1980/8 with LoD-1980/90
(o) ID(R)-1970/90 avg w/ LoD-1970/90
(p) ID(S)-1970/9 with LoD-1970/80
(q) ID(S)-1980/8 with LoD-1980/90
(r) ID(S)-1970/90 avg with LoD-1970/90

Sources

PRI values (1972-98) have been taken directly from R. Gastil's annual *Freedom In The World* surveys. See references in the Statistical Bibliography.

ID values have been taken from two sources: ID values for 1960/9 and 1970/9 come from the Appendix, pp. 137-159, in Vanhanen (1984); and ID values for 1980/88 are from Table 2.2, pp. 27-29, in Vanhanen (1990). See references in the Statistical Bibliography.

Technical Note 2: The UNDP's Human Development Index (HDI)

The UNDP's Human Development Index (HDI) has been modified in several technical respects since the first Human Development Report appeared in 1990. The version of the HDI which I employ as my measure of individual capabilities comes from the 1994 Report. This version was selected for methodological consistency: my time-series HDI values come principally from the Report's Annex Table A5.3.

The HDI consists of three sub-indices: life expectancy, educational attainment (mean years of schooling and adult literacy rate), and adjusted income (in PPP$). The exact computations and indexing procedures are found in the 1994 Report's Technical Note 1 (UNDP 1994: 108).

Point and Period Measurement

With the exception of the special cases (described below), all HDI values for 1970, 1980 and 1990 are taken from Annex Table A5.3 in the 1994 Report (UNDP 1994: 105).

HDI period values (1970/80, 1980/90, 1970/90) reflect the increase in HDI levels between two dates, and are computed by simply taking the difference between the two dates in question. For instance, the following equation would be employed to calculate the 1980/90 HDI increase (also referred to as the performance rate) for a given country (in this example, Thailand):

$$\text{Thailand (HDI 1980/90)} = \text{HDI 1990} - \text{HDI 1980} = 0.798 - 0.551 = 0.247$$

The list of HDI values for all countries is presented in Appendix C.

Special Cases

There are 11 countries in my study for which HDI values are not found in the time-series format of Annex Table A5.3: Albania, Bulgaria, Cuba, Czechoslovakia, East Germany (GDR), Kuwait, Libya, Poland, Romania, USSR and Yugoslavia.

As the c1990 HDI values for these countries are found in the 1994 Report (with the exceptions of GDR and Yugoslavia, which were calculated below), I was obliged to compute

their HDI values for c1970 and c1980. This was done by first obtaining the relevant data on each individual HDI component (longevity, knowledge and income standard), and then indexing the raw data. The HDI values were then calculated according to the weighting scheme adopted by the UNDP (1/3 weight for each sub-index). Given the unavailability or incompleteness of much of the data for the required period, owing primarily to poor individual country sources, several different sources were consulted.

I tried to remain as true to the UNDP's methodological guidelines as possible, but was sometimes forced to substitute one indicator for another. The extent of this, however, involved either substituting gross enrollment ratios for mean years of schooling (in the educational attainment index) or one source of GDP/C (PPP$) for another (in the adjusted income index).

As a final reliability check, raw HDI values were also computed for two 'reference countries' - Hungary for the former communist countries and Cuba, and the UAE for Kuwait and Libya - using the same techniques employed for the special cases. The raw computed HDI values for each set of special case countries were then compared to those obtained for the corresponding 'reference country' (for which actual HDI values *are* given in the UNDP's Annex Table A5.3), and then adjusted into their final HDI values.

For example, I had originally calculated Romania's raw HDI value for 1970 to be 0.701, which was 84.7% of the raw HDI value (0.828) calculated for its reference country, Hungary. Hence, knowing that Hungary's *actual* HDI value was 0.705 (from the 1994 Report), and applying the same percentage difference between the two countries that was found for the raw estimates, Romania's adjusted HDI value was computed as:

$$\text{Romania HDI (adj.)} = 0.705 \times 84.7\% = 0.597$$

By this method, the HDI values calculated for the special case countries are consistent in relative terms with the UNDP's HDI values for the other countries in my sample. Therefore, though derived using slightly different techniques (out of necessity), the adjusted HDI values may be viewed as fairly good approximations. Table N2.1 (overleaf) provides a detailed breakdown of the data and the corresponding computations. The column on the far right (HDI) denotes the final adjusted HDI values used in this study.

Table N2.1 Computing the HDI Values for Special Case Countries

Country	LE	*I(LE)*	Lit	Enrol	*I(ED)*	PPP$	*I(AD)*	*HDI(R)*	Adj.F	HDI
(a) 1970										
Kuwait	66.1	0.685	54.0	73.0	0.603	4189	0.769	0.685	1.138	0.684
Libya	51.9	0.448	39.0	95.0	0.577	1873	0.187	0.404	0.671	0.403
UAE	*61.1*	*0.602*	*20.9*	*63.0*	*0.349*	*4637*	*0.856*	*0.602*	*1.000*	*0.601*
Albania	68.0	0.717	78.2	86.0	0.808	1381	0.228	0.584	0.705	0.497
Bulgaria	71.0	0.767	92.0	98.0	0.940	3888	0.711	0.806	0.973	0.686
Czechosl.	70.0	0.750	99.0	78.0	0.920	5718	0.958	0.876	1.058	0.746
GDR	71.0	0.767	99.0	93.0	0.970	5822	0.959	0.899	1.086	0.766
Poland	70.2	0.753	98.0	83.0	0.930	3878	0.709	0.797	0.963	0.679
Romania	68.8	0.730	94.0	87.0	0.917	2557	0.455	0.701	0.847	0.597
USSR	68.6	0.727	98.0	94.0	0.967	4462	0.822	0.839	1.013	0.714
Yugoslavia	67.7	0.712	84.0	77.0	0.817	2878	0.516	0.682	0.824	0.581
Cuba	71.9	0.782	87.0	74.0	0.827	2485	0.441	0.683	0.825	0.582
HUNGARY	*69.8*	*0.747*	*98.0*	*84.0*	*0.933*	*4369*	*0.804*	*0.828*	*1.000*	*0.705*
(b) 1980										
Kuwait	70.8	0.763	67.5	89.0	0.747	20204	0.996	0.835	1.070	0.769
Libya	57.3	0.538	56.0	95.0	0.690	11735	0.980	0.736	0.940	0.676
UAE	*68.2*	*0.720*	*53.5*	*77.0*	*0.613*	*25629*	*1.004*	*0.779*	*1.000*	*0.719*
Albania	70.4	0.757	85.0	93.0	0.877	1621	0.274	0.636	0.719	0.603
Bulgaria	71.3	0.772	93.0	94.0	0.933	4881	0.903	0.869	0.982	0.823
Czechosl.	70.6	0.760	99.0	91.0	0.963	6969	0.965	0.896	1.012	0.848
GDR	71.7	0.778	99.0	94.0	0.973	7855	0.969	0.907	1.025	0.859
Poland	70.9	0.765	98.0	92.0	0.960	4983	0.922	0.883	0.998	0.836
Romania	69.7	0.745	98.0	93.0	0.963	3982	0.719	0.809	0.914	0.766
USSR	67.9	0.715	99.0	99.9	0.993	5599	0.957	0.888	1.003	0.841
Yugoslavia	68.9	0.732	90.0	89.0	0.897	4712	0.870	0.833	0.941	0.789
Cuba	74.2	0.820	95.0	91.0	0.937	2903	0.521	0.759	0.858	0.719
HUNGARY	*69.7*	*0.745*	*99.0*	*88.0*	*0.953*	*5482*	*0.956*	*0.885*	*1.000*	*0.838*

Notes.
1. HDI(R): the raw HDI value, which equals (I(LE) + I(ED) + I(AD)) / 3
2. Adj.F (factor): HDI(R) divided by HDI(R) of reference country (UAE or Hungary)
3. HDI: the final adjusted HDI value, which equals Adj.F x HDI of reference country

Computing HDI Values for Special Case Countries: Techniques and Sources

In computing the HDI values for the special case countries, attention was given to the procedures outlined in the 1994 Human Development Report (Technical Note 1). Specifically, the new HDI values were computed after first translating the data into the HDI's three constituent sub-indices, and then taking the average of the three:

$$HDI = (I(LE) + I(ED) + I(AI)) / 3$$

where: I(LE) is Indexed Life Expectancy
I(ED) is Indexed Educational Attainment
I(AI) is Indexed Adjusted Income

The techniques involved in computing the sub-indices, together with the sources for the raw data, are described below. The sub-indices are constructed as per UNDP guidelines (except where specified).

•Indexed Life Expectancy (I(LE))

Technique:

$I(LE) = (X - Min) / (Max - Min) = (X - 25) / 60;$
where Max=85 and Min=25, X=raw data (years)

Data Sources:

UNDP (1990, 1994), UN (1992), World Bank (1992a, 1992b)

•Indexed Educational Attainment (I(ED))

Technique:

(Due to lack of data, the combined primary and secondary school gross enrolment rates indicator was substituted for the UNDP's mean years of schooling indicator)

$I(ED) = (2(Lit) + Enr) / 3;$
where: Lit is the raw adult literacy rate (%),
Enr is the combined primary and secondary enrol.rate (%)

Data Sources:

Adult Literacy Rates: Banks (1971), UNDP (1990, 1991, 1994), UNESCO (1990), World Bank (1983). Note: Albania and Romania (1970) estimated from Banks.

Combined Primary and Secondary School Enrolment Rates: UNDP (1993), UNESCO (1970, 1975, 1976, 1981, 1986, 1992)

•Indexed Adjusted Income (I(AI))

Technique:

I(AI) = (X - Min) / (Max - Min) = (X - 200) / 5185;
where: X=raw data (PPP$); Min = 200,Max= 5385

However, before income above 5120 (the 'threshold PPP$') is applied to the above formula it is first scaled (thereby 'discounting at a progressively higher rate'):

Income adjusted = 5120 + 2(X - 5120)exp1/2

Data Sources:

Summers and Heston (1984, 1988), UNDP (1991, 1992, 1994), UN (1993a).
Note: raw PPP$ for Libya is presented as WB Atlas Method (in UN 1993a).

Further Notes

1. HDI Values (c1990) for GDR and Yugoslavia:

HDI values (c.1990) are not given in the UNDP's Annex Table A5.3 for the former East Germany (GDR) and Yugoslavia. The 'reference country' method was therefore applied to determine these values (as above, using Hungary). Obtaining the c1990 values from the 1991 HDR (which employed a slightly different HDI measure), the relative differences for GDR and Yugoslavia were calculated with Hungary=100. I then multiplied the relative factors for the two countries by Hungary's actual HDI value (from the 1994 Report) to get the approximate 1990 values: GDR=0.899, Yugoslavia=0.861.

2. Computing PPP$ for Special Case Countries (former Communist countries and Cuba):

(a) Former Communist Countries (excl. Albania and Cuba).

As Purchasing Power Parity (PPP$) values are generally unavailable for centrally planned economies, I was obliged to employ some creative techniques in order to arrive at what I feel are reasonable approximations. Several notes of caution are therefore warranted.

Knowing the 1960 PPP$ values for three countries (Hungary, Poland and Yugoslavia) from the 1991 and 1992 Reports, and obtaining their respective Real Gross Domestic Product per capita (RGDP/C) values for 1960 from Summers

and Heston (1984), I discovered that a definite relationship existed between the two variables:

PPP$ divided by RGDP/C = 1.42

Since this factor of 1.42 was found for all three countries (and even, as a reliability check, for the United States), I concluded that it would serve as a useful means of determining the remaining PPP$ values (knowing only the RGDP/C values).

The PPP$ values for Bulgaria, Czechoslovakia, GDR, Hungary, Poland, Romania, USSR, and Yugoslavia for 1970 and 1980 were therefore calculated by multiplying their respective RGDP/C values (from Summers and Heston 1984) by the factor of 1.42.

The relative consistency of the calculated PPP$ values was further confirmed by comparing the PPP$ values for 1980 with the Real Gross National Product per capita (RGNP/C) values from Summers and Heston (1988). For all eight countries, the differential was exactly the same (PPP$/RGNP(C) = .995).

(b) Albania and Cuba.

The PPP$ values for Albania and Cuba could not be calculated as above because their respective RGDP/C values are not given in Summers and Heston. The GDP/C (Market Exchange Rates) values for the eight former Communist countries and Albania and Cuba are, however, listed in United Nations (1993a).

The GDP/C averages for the eight countries were first calculated for both 1970 and 1980. Then the GDP/C values for Albania and Cuba for 1970 and 1980 were divided into the respective eight-country averages to obtain a percentage. Albania's GDP/C values were 37.0% and 29.2% of the eight-country averages for 1970 and 1980, respectively, while the corresponding figures for Cuba were 57.6% and 56.6%. These percentages were then multiplied against the eight-country average PPP$ values for 1970 and 1980 to obtain the PPP$ values for Albania and Cuba.

Technical Note 3: The Index of Social Conditions (ISC) and its Constituent Indices (SEC, LIB, MOB)

(1) The Index of Social Conditions (ISC)

Overview

My measure of the prevailing social environment, the Index of Social Conditions (ISC), combines three separate indices according to the formula:

$$\mathbf{ISC = (SEC \times .4) + (LIB \times .4) + (MOB \times .2)}$$

where: SEC = The Security Index
LIB = The Liberty Index
MOB = The Mobility Index

The decision to weigh the three indices in this manner was a subjective one. However, it seems reasonable to assume that the indices representing the Security and Liberty dimensions should be weighted equally, given the equal treatment of the two dimensions in the UNDP's own investigation into 'Human Security' (see Chapter 3). In turn, it is felt that they should be accorded twice as much weight (40% each) as the Mobility Index (20%); which, though important, does not have as immediate nor as fundamental an impact on people's lives as, say, either the outbreak of socio-political conflict or the suspension of civil liberties.

In order to be consistent with the scaling systems used for the HDI and the ISC's three sub-indices (see below), countries are accorded ISC values ranging from between 1.000 (the highest possible value) to 0.000 (the lowest possible value). The ISC values for all the countries in my sample are presented in Appendix D.

Point and Period Measurement

A country's ISC value is calculated by simply inserting the necessary values for each sub-index (SEC, LIB and MOB) for the date in question (1970, 1980 or 1990) into the above formula. Hence, to calculate a country's ISC value for around 1970:

$$ISC_{1970} = (SEC_{1970} \times .4) + (LIB_{1970} \times .4) + (MOB_{1970} \times .2)$$

For example, the ISC value for Malta (1970) is calculated as:

$$ISC_{1970} = (0.976 \times .4) + (0.889 \times .4) + (0.488 \times .2) = 0.843$$

ISC period values (1970/80, 1980/90, 1970/90) reflect the changes (increases / decreases) in ISC levels between the two dates in question. The change in a country's ISC values over the period 1970/1980 is calculated as:

$$ISC^*_{1970/80} = ISC_{1980} - ISC_{1970}$$

*A positive value indicates an improvement in social conditions, a negative value indicates a deterioration in social conditions.

For example, the ISC value for Morocco (1970/80) is computed as:

$$ISC_{1970/80} = ISC_{1980} - ISC_{1970} = (0.579) - (0.654) = -0.076^*$$

*indicates a slight deterioration in social (ISC) conditions

(2) The Security Index (SEC)

The Security Index (SEC) is comprised of two equally-weighted sub-indices, one measuring economic (in)security and one measuring socio-political (in)security, so that:

SEC = (INFL + CONF) / 2

where: INFL = inflation index, CONF = conflict index

Each component captures one vital aspect of a country's security situation. In practice, a country experiencing extreme socio-political instability will almost inevitably experience economic instability (although the reverse is not necessarily true).

All countries are accorded SEC values ranging from 1.000 (maximum security) to 0.000 (maximum insecurity). The SEC values for all the countries in my sample are presented in Appendix E.

Point and Period Measurement

A country's SEC value is calculated by simply inserting the necessary values for each sub-index (INFL and CONF) for the date in question (1970, 1980 or 1990) into the above formula. Hence, to calculate a country's SEC value for around 1970:

$$SEC_{1970} = (INFL_{1970} + CONF_{1970}) / 2$$

For example, the SEC value for Cyprus c1970 is calculated as:

$$SEC_{1970} = (INFL_{1970} + CONF_{1970}) / 2 = (0.934 + 0.720) / 2 = 0.827$$

SEC period values (1970/80, 1980/90, 1970/90) reflect the changes (increases / decreases) in SEC levels between the two dates in question. For instance, the change in a country's SEC values over the period 1970/1980 is computed as:

$$SEC^*_{1970/80} = SEC_{1980} - SEC_{1970}$$

*A positive value indicates an improvement in security conditions, a negative value indicates a deterioration in security conditions.

For example, the SEC value for El Salvador (1970/80) is calculated as:

$$SEC_{1970/80} = SEC_{1980} - SEC_{1970} = (0.490) - (0.859) = -0.369^*$$

*indicates a noticeable deterioration in security conditions

•The INFL variable

The INFL variable indicates the scaled inflation rate (where inflation rates could not be found, consumer price index values were used as substitute measures). The list of all scaled INFL values is presented in Appendix F.

Measurement

The raw inflation value corresponding to a particular date is taken as the average inflation rate for the 10-year period that preceded it (as provided in World Bank sources); although in some cases I have had to rely on other period averages (1965-73, 1973-83, or 1980-91). This was done to best capture the true inflationary climate prior to the date in question

(since inflation rates may fluctuate wildly from one year to the next). Hence, generally speaking:

INFL 1970 = 1960/70 avg.
INFL 1980 = 1970/80 avg.
INFL 1990 = 1980/90 avg.

Scaling

Raw inflation values are scaled using the technique below:

$$INFL = 1 - (Max - X)/(Min) = 1 - (0-X)/(-50) = 1 - (X)/(50)$$
where: Max= 0, Min=50

Therefore, countries are accorded an indexed INFL value between 1.000 (highest degree of economic security - i.e. zero inflation, or even negative values indicating 'deflation') and 0.000 (least degree of economic security - i.e. inflation rates of 50% or more).

Sources

Most inflation statistics are drawn from the World Bank's various *World Development Reports*: World Bank 1983 (1960-70), World Bank 1985 (1965-73, 1973-83), World Bank 1990a (1980-88), World Bank 1992a (1980-90), World Bank 1993 (1970-80, 1980-91). Other sources include: World Bank (1991b); UNDP (1993, 1994).

For several countries whose inflation rates were not available for any or all dates - mostly the former communist states, Cuba, Angola, Jordan, Mozambique, UAE and Guinea - I have had to rely on estimates based on average variations in their consumer price indexes. The sources consulted here include: various UN *Statistical Yearbooks* (UN 1971, 1981a, 1984a, 1991a), ILO (1994a), IMF (1988a, 1988b).

•The CONF variable

There are, unfortunately, no existing measures of socio-political conflict in cross-national, time-series formats. I have been forced to therefore construct my own peace/conflict index (CONF) from raw data indicating the number of conflict-related deaths for all warring parties. Hence, the CONF variable measures the *severity* of a given conflict. The CONF values (scaled) for all states are given in Appendix G.

In the case of intra-state conflict (civil war, other expressions of socio-political violence, etc), the total number of conflict deaths for all indigenous factions is recorded. For conflicts involving two or more states, the total number of conflict deaths for all warring parties is taken together and then attributed to each state (regardless of the number of deaths on each side). Thus, when considering the USSR's invasion of Czechoslovakia in 1968, which claimed an estimated 100 lives, both the USSR and Czechoslovakia are each 'allocated' the scaled equivalent of 100 deaths. It is, for all intents and purposes, almost impossible to attribute reasonable estimates of deaths per warring state for a sample of this size (and my reference sources do not do so). Furthermore, as a 'security component', the CONF variable must not only take into account the devastating impact of a particular conflict on the state which happens to bear the brunt of the fighting (the main battleground), it must also 'punish' the state which inflicts (or participates in) the carnage. The wars in Vietnam and Afghanistan are prime illustrations of this point: the CONF values for the USA and USSR, respectively, must reflect the severity of the conflicts in which they were engaged (especially given, moreover, the tremendous psychological and material tolls on the home fronts).

Measurement

For measurement purposes, conflicts have been broken down according to specific periods. The first two periods (1965-74 and 1975-84) are measured as 10-year averages, while the last period (1985-93) is measured as a nine-year average. The measurement periods correspond to CONF values as follows:

CONF 1970 = 1965-74 avg.
CONF 1980 = 1975-84 avg.
CONF 1990 = 1985-93 avg.

Hence, the severity of a conflict which may have lasted from 1965-67 is captured in the CONF value for c1970. To search only for the existence of conflict at that exact point in time (1970) would be to potentially underestimate and misrepresent the security situation in a particular country, since the ramifications of war (in terms of human, material and psychological costs) are often felt long after the cessation of hostilities.

Consider the example of Indonesia. Someone examining the degree of socio-political strife in Indonesia for 1970 may, owing to the number of conflict-deaths recorded for that particular year (0), conclude that Indonesia was completely at peace and therefore entitled to a CONF value of 1.000 (denoting maximum socio-political security). However, under my approach, the 500 000 deaths which resulted from the internal conflict of 1965-66 would be reflected in Indonesia's CONF value for c1970 (0.000 or maximum insecurity). The magnitude of such a conflict cannot be dismissed simply because it did not occur exactly on

the reference date. By measuring conflict according to my technique, the security situation for every year from 1965-1993 is accounted for.

What about trying to determine CONF values for conflicts which spanned two or more periods? For instance, to which measurement period should one allocate the values for a conflict which lasted from 1972-77 (Pakistan's conflict with Baluch and other separatists, which claimed an estimated 9000 lives)? Three years (1972, 1973 and 1974) fall within the period for CONF c1970 (1965-74), while three years (1975, 1976, 1977) fall within the period for CONF c1980 (1975-84). For such cases, two steps are followed:

Step 1.
The total number of conflict-related deaths are divided by the number of years of conflict to get the average deaths/year.

Step 2.
The average deaths/year are then multiplied by the number of 'conflict years' falling within each measurement period (to get the deaths per measurement period).

Thus, in the above example we have:

Step 1. 9000 deaths / 6 years = 1500 deaths/year
Step 2. For c1970: 1500 deaths/year x 3 years of conflict = 4500 deaths (c1970)
For c1980: 1500 deaths/year x 3 years of conflict = 4500 deaths (c1980)

Admittedly, this is a crude method because it does not reflect the actual intensity of conflict for each specific period (and the corresponding number of *actual* deaths for each specific year). Nonetheless, because my sources simply list the total deaths per conflict, I was forced to use this method of approximation.

One final note must be made regarding those instances where a country was engaged in two or more conflicts within one measurement period. In such cases, the number of total deaths attributable to that country (for all the conflicts in which it was engaged) were added up and then recorded for that measurement period. Thus, for the USSR I have recorded 1100 conflict deaths circa 1970: 100 deaths (conflict with Czechoslovakia in 1968) plus 1000 deaths (border skirmishes with China in 1969).

Scaling

There is a two-step procedure for calculating a country's CONF index value:

Step 1.

The number of conflict deaths per measurement period is scaled as follows:

Deaths/Period (scaled) = (Max. - X) / (Max. - Min) = (50 000 - X)/(50 000)
where: Max.=50 000 deaths, Min=0 deaths.

Thus, countries with attributable conflict deaths of 50,000 or more in a given measurement period are allocated the lowest possible scaled value of 0.000.

Step 2.

The scaled Deaths/Period value is then multiplied by a 'peace buffer' value of either:

(a) 0.8 for countries with 100 Deaths/Period or more; or
(b) 1.0 for countries with less than 100 Deaths/Period (or no recorded conflict deaths)

Thus, the following equation emerges:

CONF = Deaths/Period (scaled) x 'peace buffer' (0.8 or 1.0)

For example, the respective CONF values for India (c1970) and Tanzania (c1980) are:

India (c1970):	*Tanzania (c1980):*
•20 000 deaths (vs Pakistan, 1965)	•3 000 deaths (vs Uganda, 11/78-6/79)
•30 000 deaths (vs Pakistan-re Bangl., 1971)	
=50 000 deaths	=3 000 deaths
CONF = 0.000 x 0.8 = 0.000	CONF = 0.940 x 0.8 = 0.752

The 'peace buffer' is introduced to reward those states which enjoyed complete socio-political security, while at the same time further distinguishing them from those states which experienced even 'low-intensity' conflict. Take the respective cases of Belgium c1990 (no conflict) and the United Kingdom c1990 (low-intensity conflict waged by both the IRA and loyalist groups):

UK (c1990):	*Belgium (c1990):*
•avg 129 Deaths/Year since 1969, x 9 years in measurement period (1985-93) =1161 deaths (total for 1985-93, approx.)	•0 deaths
CONF = 0.977 x 0.8 = 0.783	CONF = 1.000 x 1.0 = 1.000

Note the practically insignificant differences between the CONF values for these two states if the different 'peace buffers' are not employed to magnify the security situations (UK 0.977, Belgium 1.000).

Sources

The principal sources used for data on conflict deaths were: SIPRI Yearbooks (editions 1987-1994), Sivard (1985), Sullivan (1991).

(3) The Liberty Index (LIB)

The Liberty Index (LIB) is comprised of two equally-weighted sub-indices, one measuring civil liberties and one measuring the degree of social deprivation, and is represented by the formula:

$$\mathbf{LIB = (CIVIL + SURV) / 2}$$

where: CIVIL = civil liberties, SURV = child survival

Each sub-index captures one supposedly 'cultural' interpretation of rights and freedoms: the 'Western' (individualist) emphasis on civil rights, and the 'Eastern' (collectivist) emphasis on social rights (Chapter 3). All countries are accorded LIB values ranging from 1.000 (maximum liberty/freedom) to 0.000 (no liberty/freedom). The LIB values for all the countries in my sample are presented in Appendix H.

Point and Period Measurement

A country's LIB value is calculated by inserting the necessary values for each sub-index (CIVIL and SURV) for the date in question (1970, 1980 or 1990) into the above formula. Hence, to calculate a country's LIB value for around 1970:

$$LIB_{1970} = (CIVIL_{1970} + SURV_{1970}) / 2$$

For example, the LIB value for Greece c1970 is calculated as:

$$LIB_{1970} = (CIVIL_{1970} + SURV_{1970}) / 2 = (0.167 + 0.912) / 2 = 0.539$$

LIB period values (1970/80, 1980/90, 1970/90) reflect the changes (increases / decreases) in LIB levels between the two dates in question. For instance, the change in a country's LIB values over the period 1970/1980 is calculated simply as:

$$LIB^{*}_{1970/80} = LIB_{1980} - LIB_{1970}$$

*A positive value indicates an improvement in overall liberty, a negative value indicates a deterioration in overall liberty.

For example, the LIB value for Spain (1970/80) is:

$$LIB_{1970/80} = LIB_{1980} - LIB_{1970} = (0.841) - (0.546) = 0.295^{*}$$

*indicates a noticeable improvement in overall liberty (in this case, following the death of Franco).

•The CIVIL Variable

Gastil has been allocating civil rights values for countries in the *Freedom in the World* surveys annually since 1973. My civil rights variable (CIVIL) is derived by simply scaling Gastil's data. The list of scaled CIVIL values is found in Appendix I.

Measurement

CIVIL values are derived from Gastil's civil liberties (CL) values (based on his Civil Rights Index) as follows:

CIVIL 1970 = CL 1972
CIVIL 1980 = CL 1979-81 avg.
CIVIL 1990 = CL 1989-91 avg.

For both CIVIL 1980 and CIVIL 1990, 3-year CL averages are computed in order to best account for the prevailing civil liberties situation surrounding that date (this cannot be done for CIVIL 1970 because Gastil's data begin at CL 1972). For instance, taking Gastil's single CL value for 1980 as the figure for CIVIL 1980 might prove misleading, for reasons attributable to all point values (recall the problems associated with Gastil's PRI point values noted in Chapter 3). Consider the case of Kuwait: for CIVIL 1980, should one use the country's CL value for 1980 ('6'), which is very poor, or for 1981 ('4'), which is noticeably better? Both should be taken into consideration, along with Kuwait's CL value for 1979 ('6'), so that:

CIVIL 1980 = (CL 1979+CL 1980+CL 1981) / 3 = (6+6+4) / 3 = 5.3

The following conversions are used to calculate the CIVIL period averages (1970/80, 1980/90, 1970/90):

CIVIL 1970/80 = CL (1972 + 1974 + 1976 + 1978 + 1980) / 5
CIVIL 1980/90 = CL (1982 + 1984 + 1986 + 1988 + 1990) / 5
CIVIL 1970/90 = (CIVIL 1970/80 + CIVIL 1980/90) / 2

Note: Gastil's CL value for Hong Kong for 1979-81 was given as '2'. This is the CL value I have taken for Hong Kong throughout (since annual data cannot otherwise be found).

Scaling

Gastil's CL values are based on a different scale format than the one chosen for CIVIL values (to ensure their convertibility into other scales). To convert Gastil's raw CL values into CIVIL values I have set Max = 1 (CL), Min=7 (CL). Hence:

CIVIL = 1 - (Max - X) / (Max - Min) = 1 - (1 - X) / (-6)

CIVIL values therefore range from 1.000 (greatest civil rights) to 0.000 (fewest/no civil rights). A CL value of 1 translates into a CIVIL value of 1.000, and a CL value of 7 translates into a CIVIL value of 0.000.

Sources
Gastil (1986, 1988, 1989, 1990, 1991).

•The SURV Variable

Child survival (SURV) rates provide a very good indication of the degree of social deprivation in a society. As an output indicator, the SURV variable also reflects the availability of adequate water and sanitation facilities, caloric intake rates, and access to basic health services. The scaled SURV values for all countries in my sample are listed in Appendix J.

Measurement

In general, the SURV rates are given for the exact dates in question (1970, 1980 and 1990), except for the cases where they had to be estimated (explained below). There were only a few cases where data had to be substituted for the closest available date (e.g. 1985 for 1980).

Scaling

A three-step process is followed for converting raw Under Five Mortality Rates (U5MR) into scaled SURV rates.

Step 1.
As per UNICEF guidelines, a country's raw U5MR rate is first converted and scaled to show the percentage of those born who survive to the age of five (SURV%):

$$SURV\% = (1000 - U5MR) / 10$$

Step 2.
This figure is then divided by 100 to express the number in three decimal places.

Step 3.
To scale the values between 1.000 (the 'best' rate - no social deprivation) and 0.000 (the 'worst' rate - extreme social deprivation), the following formula is applied:

SURV (scaled) = 1 - (Max - X) / (Max - Min) = 1 - (1 - X) / (.5)

where: Max = 1, Min = 50*

*The lowest SURV% value among the countries in my sample throughout the entire 1970/90 period was 64.2% for Mali c1970. I thus simply reducedthe minimum value to 50 rather than have Min=Mali U5MR=64.2.

Knowing its U5MR value (62.0), Argentina's scaled SURV rate for c1970 is calculated as:

Step 1. SURV% = (1000 - 62) / 10 = 93.8
Step 2. 93.8 / 100 = .938
Step 3. SURV (scaled) = 1 - (1 - .938) / (.5) = 0.876

Notes Regarding Estimates for Missing Data

Raw U5MR data for around 1970 were not available for most industrial countries in my sample. However, knowing the relevant data for c1960 and c1980, I took the average of the two dates as my estimation of U5MR data for c1970. Hence, to use Australia as an example:

Given that: Raw U5MR c1960 = 25.0, Raw U5MR c1980 = 13.0,
Raw U5MR c1970 (est.) = (25.0 + 13.0) / 2 = 19.0

In the case of Yugoslavia, I had to first estimate the raw U5MR rate for c1960 (from the survival rate given in UNICEF 1987); and then, knowing the raw U5MR value for c1980, I estimated the figure for c1970 using the formula above.

Sources

UNICEF (1987, 1991a, 1991b, 1995).

(4) The Mobility Index (MOB)

The Mobility Index (MOB) is comprised of three equally-weighted sub-indices - measuring social equity, occupational stratification and opportunities for social advancement - so that:

$$\mathbf{MOB = (GEND + \%NAgr + TERT) / 3}$$

where: GEND = gender equity
%NAgr = % of workers not employed in agriculture
TERT = tertiary enrollment rate

Each sub-index captures an important dimension of social mobility/opportunity (described below). All countries are accorded MOB values ranging from 1.000 (maximum mobility/opportunity) to 0.000 (no mobility/opportunity). The MOB values for all the countries in my sample are presented in Appendix K.

Point and Period Measurement

A country's MOB value is calculated by inserting the necessary values for each sub-index (GEND, %NAgr, and TERT) for the date in question (1970, 1980 or 1990) into the above formula. Hence, to calculate a country's MOB value for around 1970:

$$MOB_{1970} = (GEND_{1970} + \%NAgr_{1970} + TERT_{1970}) / 3$$

For example, the MOB value for Jordan c1970 is calculated as:

$$MOB_{1970} = (GEND_{1970} + \%NAgr_{1970} + TERT_{1970}) /3 = (0.199+0.660+0.029) /3 = 0.296^*$$

*In this example, Jordan scores poorly in terms of gender equity and tertiary enrollment, and modestly in terms of occupational stratification. It therefore has a low overall MOB value.

MOB period values (1970/80, 1980/90, 1970/90) reflect the changes (increases / decreases) in MOB levels between the two dates in question. For instance, the change in a country's MOB values over the period 1970/1980 is calculated simply as:

$$MOB^*_{1970/80} = MOB_{1980} - MOB_{1970}$$

*A positive value indicates an improvement in social mobility, a negative value indicates a deterioration in social mobility.

For example, the MOB value for Cuba (1970/80) is calculated as:

$$MOB_{1970/80} = MOB_{1980} - MOB_{1970} = (0.580) - (0.339) = 0.241^{*}$$

*indicates a noticeable increase in the level of social mobility

The GEND Variable

My measure of social equality/equity, the Gender Equity index (GEND), combines two separate indicators which reflect the status of women in society, female secondary enrollment rates (FSec) and women in the labour force as a % of total labour force (%FLab), as follows:

$$GEND = (FSec \times .7) + (\%FLab \times .3)$$

The %FLab indicator has been given less weight (30%) than the FSec indicator (70%) because it does not discriminate as well between the nature of the work that women may be doing in different societies (and is therefore less reliable as a basis of comparison). For instance, the %FLab rate for Benin around 1970 was 48%, whereas the comparable rate for Switzerland was only 34%; no one can possibly make the argument, on this basis, that women in Benin were 'better off' than their counterparts in Switzerland.

GEND values for all countries in my sample are given in Appendix L.

Measurement

In general, the GEND rates are given for the exact dates in question (1970, 1980, 1990), except for the cases where they had to be estimated (explained below). There were only a few cases where data had to be substituted for the closest available date (e.g. 1985 for 1980).

Scaling

GEND values range from 1.000 (maximum gender equity) to 0.000 (least/no gender equity). GEND values can only be calculated once the raw FSec and %FLab values have been scaled.

Raw FSec rates are scaled by simply dividing the raw data by 100. Gross enrollment rates of 100 (or more, due to methodological variations) are accorded a scaled value of 1.000, rates of 90% are accorded a scaled value of 0.900, and so forth.

Raw %FLab rates are scaled as follows:

$$\%FLab\ (scaled) = 1 - (Max - X) / (Max - Min) = 1 - (55 - X) / (55)$$

where: Max= 55 (the highest recorded value in my sample was 51% for the USSR c1990 - I therefore increased the maximum 'ceiling' slightly), and Min=0.

The scaled FSec and %FLab values are then inserted into the above equation to determine GEND values. For instance, the GEND value for Mexico c1990 is calculated as:

$$GEND = (FSec \times .7) + (\%FLab \times .3) = (0.530 \times .7) + (0.491 \times .3) = 0.518$$

Estimating for Missing Data (FSec)

There were several countries for which FSec data had to be estimated on the basis of combined male and female enrollment rates: Angola (c1990), Guatemala (c1980 and c1990), Uruguay (c1980 and c1990), the Dominican Republic (c1980 and c1990). For Libya (c1990), Liberia (c1990), and Congo (c1990), estimates were made on the basis of literacy rates and mean years of schooling. For USA c1970 the female enrollment rates (1st and 2nd levels) for 1974 were used as substitute figures.

Sources

Sources for FSec data include: UNESCO's *Statistical Yearbooks* (various years), UNESCO's *World Education Report* (1991, 1993), World Bank (1993), UNDP (1994).

Sources for %FLab data include: IBRD *World Tables* (World Bank 1972, 1980, 1987b, 1992c, 1994c), and World Bank (1988b, 1994b).

•The %NAgr Variable

For my measure of occupational stratification, I have selected the percentage of the workforce *not* employed in agriculture (%NAgr). An economy which is overwhelmingly

reliant on its agricultural sector is one in which the working population is effectively 'tied to the land'. In such cases, social mobility, in terms of occupational opportunities, is very low.

Why not use instead the percentage of people employed in service industries, given that the most sophisticated economies (OECD) are largely service-based? The reason is that this particular indicator is misleading since the definition of service-related employment varies widely from one country to another. Moreover, service-related jobs in developing countries are not strictly comparable to those in the industrial countries. Consider the examples of Zambia and Austria: since both countries had a similar percentage of workers employed in service industries around 1990 (54% and 56%), they are better differentiated on the basis of agricultural employment, where the differences are pronounced (38% and 7%).

Scaled %NAgr values for all countries in my sample are presented in Appendix M.

Measurement

The %NAgr rates are generally given for the exact dates in question (1970, 1980 and 1990). There were only a few cases where data had to be substituted for the closest available date (e.g. 1985 for 1980).

Scaling

Raw data pertaining to the percentage of the workforce employed in agriculture are converted onto the (inverted) %NAgr scale, ranging from 1.000 (most occupational mobility/opportunity) to 0.000 (least mobility/opportunity), according to the formula:

$$\%NAgr\ (scaled) = 1 - ((Max - X) / (Max - Min)) = 1 - ((-X) / (-100)) = 1 - (X / 100)$$

where: Max = 0 (Singapore c1990), Min = 100 (a level less than Nepal's 94% agricultural employment rate for c1970); and X = percentage of workforce employed in agriculture

Therefore, knowing that 3% of its workforce was employed in the agricultural sector in 1990, the %NAgr value for the United States is computed as:

$$\%NAgr = 1 - (X / 100) = 1 - (3/100) = 0.970$$

Sources:

Sources consulted for data (% employed in agriculture) include: World Bank (1983, 1988a, 1992b), UNDP (1994).

•The TERT Variable

The third measure of social mobility, the tertiary enrollment variable (TERT), reflects the opportunities available in a society for both higher education and social advancement (better job prospects, perhaps in the professional classes; I have found correlation coefficients of 0.75 (N=60, c1970) and 0.78 (N=50, c1990) between tertiary enrollment rates and the size of professional classes).

The complete list of scaled TERT values for all countries is given in Appendix N.

Measurement

The TERT rates are presented for the exact dates in question (1970, 1980, 1990), except for one case where the TERT rate had to be estimated (Gambia c1970). There were only a few cases where data had to be substituted for the closest available date (e.g. 1985 for 1980).

Scaling

To convert raw tertiary enrollment rates into scaled TERT values, ranging from 1.000 (highest possible value) to 0.000 (lowest possible value), the following formula is used:

$$TERT = 1 - (Max - X) / (Max - Min) = 1 - (75 - X) / (75)$$

where: Max = 75 (the highest recorded value was found for USA c1990, 72.2 - I just increased the maximum ceiling slightly); Min = 0.

Hence, Finland's TERT value for 1980 is calculated as:

$$TERT = 1 - (75 - 32.2) / 75 = 0.429$$

Sources

UNESCO *Statistical Yearbooks* (various), UNESCO *World Education Report* (1993), World Bank (1993).

APPENDIX A - List of Countries By Regional Group (N=123)

Industrial (IND, N=35)	Asia (ASI, N=16)	Latin America (LAT, N=23)	Middle East & North Africa (MID, N=13)	sub-Saharan Africa (AFR, N=36)
Albania	Afghanistan	Argentina	Algeria	Angola [1]
Australia	Bangladesh [1]	Barbados	Egypt	Benin
Austria	China	Bolivia	Iran	Botswana
Belgium	Hong Kong [2]	Brazil	Iraq	Burkina Faso
Bulgaria	India	Chile	Jordan	Burundi
Canada	Indonesia	Colombia	Kuwait	Cameroon
Cyprus	Korea, S.	Costa Rica	Libya	Cen. Afr. Rep.
Czechoslovakia	Malaysia	Cuba	Morocco	Chad
Denmark	Myanmar	Dominican Rep.	Saudi Arabia	Congo
Finland	Nepal	Ecuador	Syria	Gabon
France	Pakistan	El Salvador	Tunisia	Gambia
GDR	Papua New G. [1]	Guatemala	Turkey	Ghana
Germany, W.	Philippines	Haiti	UAE	Guinea
Greece	Singapore	Honduras		Ivory Coast
Hungary	Sri Lanka	Jamaica		Kenya
Iceland	Thailand	Mexico		Lesotho
Ireland		Nicaragua		Liberia
Israel		Panama		Madagascar
Italy		Paraguay		Malawi
Japan		Peru		Mali
Luxembourg		Trinidad & T.		Mauritius
Malta		Uruguay		Mozambique [1]
Netherlands		Venezuela		Niger
New Zealand				Nigeria
Norway				Rwanda
Poland				Senegal
Portugal				Sierra Leone
Romania				Somalia
Spain				South Africa
Sweden				Sudan
Switzerland				Tanzania
UK				Togo
USA				Uganda
USSR				Zaire
Yugoslavia				Zambia
				Zimbabwe [1]

Notes

[1] The country became independent after 1970, the starting date for the empirical analysis. Some of its index values for the period 1970-90 were therefore recorded when the country was still a colony.

[2] Despite its technical status as a colony over the 1970-90 period, the unique case of Hong Kong is treated as an 'independent state' for the purposes of this research, a practice not uncommon in the literature on the political economy of East Asia.

APPENDIX B - Level of Democracy (LoD) Values*
Part 1. All Countries (Alphabetical Order)

Country	LoD 1970	LoD 1980	LoD 1990	LoD 1970/ 1980	LoD 1980/ 1990	LoD 1970/ 1990
Afghanistan	5.5	7.0	6.9	6.8	6.9	6.9
Albania	7.0	7.0	7.0	7.0	7.0	7.0
Algeria	6.5	6.5	5.7	6.6	5.9	6.5
Angola	7.0	6.8	7.0	6.6	7.0	6.8
Argentina	4.0	6.0	1.2	6.3	2.0	3.2
Australia	1.0	1.0	1.0	1.0	1.0	1.0
Austria	1.0	1.0	1.0	1.0	1.0	1.0
Bangladesh	2.0	4.0	4.4	4.6	4.4	4.5
Barbados	1.0	1.0	1.0	1.0	1.0	1.0
Belgium	1.0	1.0	1.0	1.0	1.0	1.0
Benin	6.5	7.0	6.9	7.0	6.9	7.0
Bolivia	4.5	6.4	2.0	6.2	2.4	3.4
Botswana	3.0	3.5	2.2	3.6	2.4	3.0
Brazil	5.5	5.5	2.5	5.7	2.8	4.2
Bulgaria	7.0	7.0	6.4	7.0	6.9	6.9
Burkina Faso	5.0	5.0	6.7	5.5	6.8	6.2
Burundi	7.0	7.0	7.0	7.0	6.9	6.9
Cameroon	4.5	6.5	6.5	6.6	6.5	6.5
Canada	1.0	1.0	1.0	1.0	1.0	1.0
Cen. Afr. Rep.	7.0	7.0	6.5	7.0	6.8	6.9
Chad	6.0	6.7	6.9	6.8	6.8	6.8
Chile	1.5	6.0	5.3	6.0	6.2	6.3
China	7.0	6.5	6.9	6.8	6.6	6.7
Colombia	2.5	2.0	2.3	2.0	2.1	2.1
Congo	6.5	7.0	6.9	6.5	6.9	6.8
Costa Rica	1.5	1.0	1.0	1.0	1.0	1.0
Cuba	7.0	6.5	7.0	6.9	6.7	6.8
Cyprus	2.0	2.7	1.1	3.0	1.2	1.9
Czech.	7.0	7.0	6.0	7.0	6.8	6.8
Denmark	1.0	1.0	1.0	1.0	1.0	1.0
Dominican R.	3.0	2.0	1.2	2.7	1.2	2.0
Ecuador	6.0	4.5	2.0	6.4	2.0	3.3
Egypt	6.5	5.5	6.0	5.8	5.9	6.0
El Salvador	4.0	3.7	2.5	2.5	2.8	2.6
Finland	1.5	1.5	1.0	1.5	1.3	1.4
France	1.0	1.0	1.0	1.0	1.0	1.0
Gabon	6.0	6.0	5.6	6.0	5.8	5.9
Gambia	2.0	2.2	2.6	2.0	2.8	2.5
GDR	7.0	7.0	6.8	7.0	6.9	7.0
Germany, W.	1.0	1.0	1.0	1.0	1.0	1.0
Ghana	6.0	4.8	6.5	6.8	6.4	6.5
Greece	4.0	2.0	1.2	3.1	1.2	1.8
Guatemala	3.0	3.4	3.5	2.7	4.1	3.4

Appendix B, Part 1 (cont'd)

Country	LoD 1970	LoD 1980	LoD 1990	LoD 1970/ 1980	LoD 1980/ 1990	LoD 1970/ 1990
Guinea	7.0	7.0	6.9	7.0	6.9	7.0
Haiti	7.0	6.7	6.5	6.7	6.7	6.7
Honduras	7.0	5.7	2.0	6.6	2.2	2.9
Hong Kong	4.0	4.0	4.0	4.0	4.0	4.0
Hungary	6.5	6.5	5.3	6.5	6.1	6.2
Iceland	1.0	1.0	1.0	1.0	1.0	1.0
India	2.0	1.5	1.5	1.5	1.5	1.5
Indonesia	6.0	5.0	6.2	5.0	6.1	5.5
Iran	6.0	6.2	5.4	6.2	5.2	5.7
Iraq	7.0	6.7	7.0	7.0	6.9	6.9
Ireland	1.0	1.0	1.0	1.0	1.0	1.0
Israel	1.5	1.5	1.5	1.5	1.5	1.5
Italy	1.0	1.2	1.0	1.2	1.0	1.1
Ivory Coast	6.5	6.4	6.5	6.5	6.4	6.4
Jamaica	1.0	2.0	2.0	1.7	2.0	1.9
Japan	1.5	1.2	1.0	1.5	1.0	1.2
Jordan	6.5	6.5	6.2	6.5	6.2	6.3
Kenya	6.0	6.0	6.5	6.0	6.4	6.2
Korea, S.	3.5	5.9	2.0	5.9	2.9	4.1
Kuwait	5.5	6.2	6.7	6.0	6.2	6.1
Lesotho	4.0	6.0	6.5	6.2	6.2	6.2
Liberia	6.5	6.5	5.5	6.5	5.3	5.9
Libya	7.0	6.5	6.9	6.9	6.6	6.7
Luxembourg	2.0	1.3	1.3	1.6	1.6	1.6
Madagascar	5.0	6.5	3.4	6.2	3.6	4.6
Malawi	7.0	6.5	6.9	6.9	6.6	6.7
Malaysia	2.0	2.5	3.4	2.4	2.8	2.6
Mali	7.0	7.0	6.5	7.0	6.9	6.9
Malta	1.0	1.7	1.3	1.4	1.6	1.5
Mauritius	3.0	2.2	2.0	2.4	2.0	2.2
Mexico	5.0	4.0	2.8	4.5	2.7	3.3
Morocco	6.0	5.3	5.5	5.7	5.5	5.6
Mozambique	7.0	6.9	6.2	6.7	6.3	6.5
Myanmar	7.0	7.0	7.0	6.9	7.0	7.0
Nepal	6.5	5.3	5.3	6.4	5.1	5.6
Netherlands	1.0	1.0	1.0	1.0	1.0	1.0
New Zealand	1.0	1.0	1.0	1.0	1.0	1.0
Nicaragua	4.0	5.2	3.2	4.9	3.6	4.0
Niger	6.5	7.0	6.9	6.9	6.9	6.9
Nigeria	5.0	4.5	4.2	6.2	3.9	5.0
Norway	1.0	1.0	1.0	1.0	1.0	1.0
Pakistan	5.0	5.4	4.7	4.2	5.5	4.9
Panama	4.5	5.7	3.9	6.7	3.6	5.3
Paraguay	3.5	3.5	4.9	3.5	5.0	4.0
Peru	5.0	5.0	2.2	6.5	2.1	2.8

Appendix B, Part 1. (cont'd)

Country	LoD 1970	LoD 1980	LoD 1990	LoD 1970/ 1980	LoD 1980/ 1990	LoD 1970/ 1990
Philippines	3.0	6.0	2.2	5.9	2.8	4.1
Papua NG	4.0	2.2	2.0	2.3	2.0	2.1
Poland	6.5	6.4	5.3	6.5	6.1	6.3
Portugal	6.0	3.0	1.0	3.8	1.1	1.6
Romania	7.0	7.0	6.4	7.0	6.4	7.0
Rwanda	7.0	6.5	6.5	6.9	6.5	6.7
Saudi Arabia	6.5	6.5	6.9	6.5	6.6	6.6
Senegal	6.0	5.5	4.3	6.2	4.2	5.1
Sierra Leone	3.0	5.0	6.4	5.2	6.1	5.6
Singapore	5.0	4.9	4.1	5.0	4.1	4.5
Somalia	4.5	7.0	7.0	7.0	7.0	7.0
South Africa	4.5	5.0	5.7	4.4	5.6	5.3
Spain	6.0	3.5	1.0	4.4	1.1	1.6
Sri Lanka	1.5	1.5	2.3	1.5	2.0	1.8
Sudan	6.5	6.0	5.0	6.4	4.6	5.7
Sweden	1.0	1.0	1.0	1.0	1.0	1.0
Switzerland	1.5	1.0	1.0	1.0	1.0	1.0
Syria	7.0	6.0	6.9	6.4	6.4	6.4
Tanzania	6.5	6.0	6.0	6.0	6.0	6.0
Thailand	7.0	5.2	3.2	6.2	3.4	4.4
Togo	7.0	7.0	6.5	7.0	6.7	6.8
Trinidad & T.	1.5	2.0	1.0	2.0	1.1	1.8
Tunisia	6.5	6.4	6.2	6.5	6.2	6.3
Turkey	2.5	2.5	2.2	1.6	2.6	2.4
UAE	7.0	5.3	5.5	5.6	5.2	5.4
Uganda	6.5	6.2	3.9	6.9	3.5	4.9
UK	1.0	1.0	1.0	1.0	1.0	1.0
Uruguay	2.0	5.2	1.2	5.2	2.1	3.0
USA	1.0	1.0	1.0	1.0	1.0	1.0
USSR	6.5	6.5	6.4	6.8	6.7	6.7
Venezuela	1.5	1.0	1.0	1.2	1.0	1.1
Yugoslavia	6.0	6.5	6.2	6.5	6.4	6.4
Zaire	6.5	6.5	6.7	6.9	6.7	6.8
Zambia	6.0	4.5	6.0	4.5	5.7	5.1
Zimbabwe	6.0	4.5	5.2	5.6	4.5	4.9

*Notes. See Technical Note 1 for the details behind the construction of the Level of Democracy (LoD) Index and the sources used. The LoD is based on a seven-point scale, with 1.0 being the most democratic score and 7.0 the least democratic (most authoritarian) score.

Appendix B (cont'd) Part 2. All Countries (By LoD Values, Date and Period)

Country	LoD 1970	Country	LoD 1980	Country	LoD 1990	Country	LoD 1970-1980	Country	LoD 1980-1990	Country	LoD 1970-1990
Australia	1.0	Australia	1.0	Australia	1.0	Australia	1.0	Australia	1.0	Australia	1.0
Austria	1.0	Austria	1.0	Austria	1.0	Austria	1.0	Austria	1.0	Austria	1.0
Barbados	1.0	Barbados	1.0	Barbados	1.0	Barbados	1.0	Barbados	1.0	Barbados	1.0
Belgium	1.0	Belgium	1.0	Belgium	1.0	Belgium	1.0	Belgium	1.0	Belgium	1.0
Canada	1.0	Canada	1.0	Canada	1.0	Canada	1.0	Canada	1.0	Canada	1.0
Denmark	1.0	Costa Rica	1.0	Costa Rica	1.0	Costa Rica	1.0	Costa Rica	1.0	Costa Rica	1.0
France	1.0	Denmark	1.0	Denmark	1.0	Denmark	1.0	Denmark	1.0	Denmark	1.0
Germ., W.	1.0	France	1.0	Finland	1.0	France	1.0	France	1.0	France	1.0
Iceland	1.0	Germ., W.	1.0	France	1.0	Germ., W.	1.0	Germ., W.	1.0	Germ., W.	1.0
Ireland	1.0	Iceland	1.0	Germ., W.	1.0	Iceland	1.0	Iceland	1.0	Iceland	1.0
Italy	1.0	Ireland	1.0	Iceland	1.0	Ireland	1.0	Ireland	1.0	Ireland	1.0
Jamaica	1.0	Netherlands	1.0	Ireland	1.0	Netherlands	1.0	Italy	1.0	Netherlands	1.0
Malta	1.0	New Zeal.	1.0	Italy	1.0	New Zeal.	1.0	Japan	1.0	New Zeal.	1.0
Netherlands	1.0	Norway	1.0	Japan	1.0	Norway	1.0	Netherlands	1.0	Norway	1.0
New Zeal.	1.0	Sweden	1.0	Netherlands	1.0	Switzerland	1.0	New Zeal.	1.0	Switzerland	1.0
Norway	1.0	Switzerland	1.0	New Zeal.	1.0	UK	1.0	Norway	1.0	UK	1.0
Sweden	1.0	UK	1.0	Norway	1.0	USA	1.0	Sweden	1.0	USA	1.0
UK	1.0	USA	1.0	Portugal	1.0	Sweden	1.0	Switzerland	1.0	Sweden	1.0
USA	1.0	Venezuela	1.0	Spain	1.0	Italy	1.2	UK	1.0	Italy	1.1
Chile	1.5	Italy	1.2	Sweden	1.0	Venezuela	1.2	USA	1.0	Venezuela	1.1
Costa Rica	1.5	Japan	1.2	Switzerland	1.0	Malta	1.4	Venezuela	1.0	Japan	1.2
Finland	1.5	Luxemb.	1.3	Trinid & T.	1.0	Finland	1.5	Portugal	1.1	Finland	1.4
Israel	1.5	Finland	1.5	UK	1.0	India	1.5	Spain	1.1	India	1.5
Japan	1.5	India	1.5	USA	1.0	Israel	1.5	Trinid & T.	1.1	Israel	1.5
Sri Lanka	1.5	Israel	1.5	Venezuela	1.0	Japan	1.5	Domin Rep.	1.2	Malta	1.5
Switzerland	1.5	Sri Lanka	1.5	Cyprus	1.1	Sri Lanka	1.5	Cyprus	1.2	Portugal	1.6
Trinid & T.	1.5	Malta	1.7	Argentina	1.2	Turkey	1.6	Greece	1.2	Luxemb.	1.6
Venezuela	1.5	Colombia	2.0	Domin Rep.	1.2	Luxemb.	1.6	Finland	1.3	Spain	1.6
Bangladesh	2.0	Domin Rep.	2.0	Greece	1.2	Jamaica	1.7	India	1.5	Trinid & T.	1.8
Cyprus	2.0	Greece	2.0	Uruguay	1.2	Colombia	2.0	Israel	1.5	Sri Lanka	1.8
Gambia	2.0	Jamaica	2.0	Luxemb	1.3	Gambia	2.0	Luxemb	1.6	Greece	1.8
India	2.0	Trinid & T.	2.0	Malta	1.3	Trinid & T.	2.0	Malta	1.6	Jamaica	1.9
Luxemb.	2.0	Gambia	2.2	India	1.5	PNG	2.3	Argentina	2.0	Cyprus	1.9
Malaysia	2.0	PapuaNG	2.2	Israel	1.5	Malaysia	2.4	Sri Lanka	2.0	Domin Rep.	2.0
Uruguay	2.0	Mauritius	2.2	Bolivia	2.0	Mauritius	2.4	Ecuador	2.0	Colombia	2.1
Colombia	2.5	Malaysia	2.5	Ecuador	2.0	El Salvador	2.5	Jamaica	2.0	PapuaNG	2.1
Turkey	2.5	Turkey	2.5	Honduras	2.0	Domin Rep.	2.7	Mauritius	2.0	Mauritius	2.2
Botswana	3.0	Cyprus	2.7	Jamaica	2.0	Guatemala	2.7	PapuaNG	2.0	Turkey	2.4
Domin Rep.	3.0	Portugal	3.0	Korea, S.	2.0	Cyprus	3.0	Peru	2.1	Gambia	2.5
Guatemala	3.0	Guatemala	3.4	Mauritius	2.0	Greece	3.1	Uruguay	2.1	Malaysia	2.6
Mauritius	3.0	Botswana	3.5	PapuaNG	2.0	Paraguay	3.5	Colombia	2.1	El Salvador	2.6
Philippines	3.0	Paraguay	3.5	Botswana	2.2	Botswana	3.6	Honduras	2.2	Peru	2.8
Sierra Leo.	3.0	Spain	3.5	Peru	2.2	Portugal	3.8	Bolivia	2.4	Honduras	2.9
Korea, S.	3.5	El Salvador	3.7	Philippines	2.2	Hong Kong	4.0	Botswana	2.4	Botswana	3.0
Paraguay	3.5	Bangladesh	4.0	Turkey	2.2	Pakistan	4.2	Turkey	2.6	Uruguay	3.0
Argentina	4.0	Hong Kong	4.0	Colombia	2.3	South Afr	4.4	Mexico	2.7	Argentina	3.2
El Salvador	4.0	Mexico	4.0	Sri Lanka	2.3	Spain	4.4	El Salvador	2.8	Ecuador	3.3
Greece	4.0	Zimbabwe	4.5	Brazil	2.5	Mexico	4.5	Malaysia	2.8	Mexico	3.3
Hong Kong	4.0	Ecuador	4.5	El Salvador	2.5	Zambia	4.5	Gambia	2.8	Bolivia	3.4
Lesotho	4.0	Nigeria	4.5	Gambia	2.6	Bangladesh	4.6	Philippines	2.8	Guatemala	3.4
Nicaragua	4.0	Zambia	4.5	Mexico	2.8	Nicaragua	4.9	Brazil	2.8	Paraguay	4.0
PNG	4.0	Ghana	4.8	Nicaragua	3.2	Indonesia	5.0	Korea, S.	2.9	Hong Kong	4.0
Bolivia	4.5	Singapore	4.9	Thailand	3.2	Singapore	5.0	Thailand	3.4	Nicaragua	4.0
Cameroon	4.5	Burk. Faso	5.0	Madagascar	3.4	Uruguay	5.2	Uganda	3.5	Philippines	4.1
Panama	4.5	Indonesia	5.0	Malaysia	3.4	Sierra Leo.	5.2	Madagascar	3.6	Korea, S.	4.1
Somalia	4.5	Peru	5.0	Guatemala	3.5	Burk Faso	5.5	Nicaragua	3.6	Brazil	4.2
South Afr	4.5	Sierra Leo	5.0	Panama	3.9	UAE	5.6	Panama	3.6	Thailand	4.4
Burk. Faso	5.0	South Afr	5.0	Uganda	3.9	Zimbabwe	5.6	Nigeria	3.9	Bangladesh	4.5
Madagascar	5.0	Nicaragua	5.2	Hong Kong	4.0	Brazil	5.7	Hong Kong	4.0	Singapore	4.5
Mexico	5.0	Thailand	5.2	Singapore	4.1	Morocco	5.7	Guatemala	4.1	Madagascar	4.6
Nigeria	5.0	Uruguay	5.2	Nigeria	4.2	Egypt	5.8	Singapore	4.1	Uganda	4.9

Appendix B, Part 2. (cont'd)

Country	LoD 1970	Country	LoD 1980	Country	LoD 1990	Country	LoD 1970-1980	Country	LoD 1980-1990	Country	LoD 1970-1990
Pakistan	5.0	UAE	5.3	Senegal	4.3	Korea, S.	5.9	Senegal	4.2	Pakistan	4.9
Peru	5.0	Morocco	5.3	Bangladesh	4.4	Philippines	5.9	Bangladesh	4.4	Zimbabwe	4.9
Singapore	5.0	Nepal	5.3	Pakistan	4.7	Chile	6.0	Zimbabwe	4.5	Nigeria	5.0
Afghanistan	5.5	Pakistan	5.4	Paraguay	4.9	Gabon	6.0	Sudan	4.6	Zambia	5.1
Brazil	5.5	Brazil	5.5	Sudan	5.0	Kenya	6.0	Paraguay	5.0	Senegal	5.1
Kuwait	5.5	Egypt	5.5	Zimbabwe	5.2	Kuwait	6.0	Nepal	5.1	South Afr	5.3
Chad	6.0	Senegal	5.5	Chile	5.3	Tanzania	6.0	Iran	5.2	Panama	5.3
Ecuador	6.0	Honduras	5.7	Hungary	5.3	Bolivia	6.2	UAE	5.2	UAE	5.4
Gabon	6.0	Panama	5.7	Nepal	5.3	Lesotho	6.2	Liberia	5.3	Indonesia	5.5
Ghana	6.0	Korea, S.	5.9	Poland	5.3	Madagascar	6.2	Morocco	5.5	Morocco	5.6
Indonesia	6.0	Argentina	6.0	Iran	5.4	Nigeria	6.2	Pakistan	5.5	Sierra Leo	5.6
Iran	6.0	Chile	6.0	UAE	5.5	Thailand	6.2	South Afri	5.6	Nepal	5.6
Kenya	6.0	Gabon	6.0	Liberia	5.5	Senegal	6.2	Zambia	5.7	Iran	5.7
Morocco	6.0	Kenya	6.0	Morocco	5.5	Iran	6.2	Gabon	5.8	Sudan	5.7
Portugal	6.0	Lesotho	6.0	Gabon	5.6	Argentina	6.3	Algeria	5.9	Liberia	5.9
Senegal	6.0	Philippines	6.0	Algeria	5.7	Sudan	6.4	Egypt	5.9	Gabon	5.9
Spain	6.0	Sudan	6.0	South Afr	5.7	Ecuador	6.4	Tanzania	6.0	Tanzania	6.0
Yugoslavia	6.0	Syria	6.0	Czech.	6.0	Nepal	6.4	Hungary	6.1	Egypt	6.0
Zambia	6.0	Tanzania	6.0	Egypt	6.0	Syria	6.4	Indonesia	6.1	Kuwait	6.1
Zimbabwe	6.0	Iran	6.2	Tanzania	6.0	Congo	6.5	Sierra Leo	6.1	Lesotho	6.2
Algeria	6.5	Kuwait	6.2	Zambia	6.0	Hungary	6.5	Poland	6.1	Kenya	6.2
Benin	6.5	Uganda	6.2	Indonesia	6.2	Ivory Coast	6.5	Chile	6.2	Hungary	6.2
Congo	6.5	Bolivia	6.4	Jordan	6.2	Jordan	6.5	Kuwait	6.2	Burk Faso	6.2
Egypt	6.5	Ivory Coast	6.4	Mozambiq	6.2	Liberia	6.5	Lesotho	6.2	Poland	6.3
Hungary	6.5	Poland	6.4	Tunisia	6.2	Peru	6.5	Tunisia	6.2	Chile	6.3
Ivory Coast	6.5	Tunisia	6.4	Yugoslavia	6.2	Poland	6.5	Jordan	6.2	Tunisia	6.3
Jordan	6.5	Algeria	6.5	Bulgaria	6.4	Saudi Arab	6.5	Mozambiq	6.3	Jordan	6.3
Liberia	6.5	Cameroon	6.5	Romania	6.4	Tunisia	6.5	Ghana	6.4	Ivory Coast	6.4
Nepal	6.5	China	6.5	Sierra Leo	6.4	Yugoslavia	6.5	Kenya	6.4	Yugoslavia	6.4
Niger	6.5	Cuba	6.5	USSR	6.4	Algeria	6.6	Ivory Coast	6.4	Syria	6.4
Poland	6.5	Hungary	6.5	Cameroon	6.5	Cameroon	6.6	Yugoslavia	6.4	Algeria	6.5
Saudi Arab	6.5	Jordan	6.5	Cen. Afr.R.	6.5	Honduras	6.6	Romania	6.4	Mozambiq	6.5
Sudan	6.5	Liberia	6.5	Ghana	6.5	Angola	6.6	Syria	6.4	Ghana	6.5
Tanzania	6.5	Libya	6.5	Haiti	6.5	Haiti	6.7	Cameroon	6.5	Cameroon	6.5
Tunisia	6.5	Madagascar	6.5	Ivory Coast	6.5	Panama	6.7	Rwanda	6.5	Saudi Arab	6.6
Uganda	6.5	Malawi	6.5	Kenya	6.5	Mozambiq	6.7	China	6.6	Rwanda	6.7
USSR	6.5	Rwanda	6.5	Lesotho	6.5	Chad	6.8	Libya	6.6	China	6.7
Zaire	6.5	Saudi Arab	6.5	Mali	6.5	Ghana	6.8	Malawi	6.6	USSR	6.7
Albania	7.0	USSR	6.5	Rwanda	6.5	USSR	6.8	Saudi Arab	6.6	Haiti	6.7
Angola	7.0	Yugoslavia	6.5	Togo	6.5	Afghanistan	6.8	Cuba	6.7	Libya	6.7
Bulgaria	7.0	Zaire	6.5	Burk Faso	6.7	China	6.8	Togo	6.7	Malawi	6.7
Burundi	7.0	Chad	6.7	Kuwait	6.7	Cuba	6.9	USSR	6.7	Cuba	6.8
Cen. Afr. R.	7.0	Haiti	6.7	Zaire	6.7	Libya	6.9	Zaire	6.7	Zaire	6.8
China	7.0	Iraq	6.7	GDR	6.8	Malawi	6.9	Haiti	6.7	Congo	6.8
Cuba	7.0	Angola	6.8	Afghanistan	6.9	Myanmar	6.9	Burk.Faso	6.8	Chad	6.8
Czech.	7.0	Mozambiq	6.9	Benin	6.9	Niger	6.9	Czech.	6.8	Togo	6.8
GDR	7.0	Afghanistan	7.0	Chad	6.9	Rwanda	6.9	Cen. Afr. R.	6.8	Angola	6.8
Guinea	7.0	Albania	7.0	China	6.9	Uganda	6.9	Chad	6.8	Czech.	6.8
Haiti	7.0	Benin	7.0	Congo	6.9	Zaire	6.9	Bulgaria	6.9	Cen. Afr. R.	6.9
Honduras	7.0	Bulgaria	7.0	Guinea	6.9	Albania	7.0	Iraq	6.9	Afghanistan	6.9
Iraq	7.0	Burundi	7.0	Libya	6.9	Benin	7.0	Mali	6.9	Niger	6.9
Libya	7.0	Cen. Afr. R.	7.0	Malawi	6.9	Bulgaria	7.0	Burundi	6.9	Bulgaria	6.9
Malawi	7.0	Congo	7.0	Niger	6.9	Burundi	7.0	Niger	6.9	Iraq	6.9
Mali	7.0	Czech.	7.0	Saudi Arab	6.9	Cen. Afr. R.	7.0	Afghanistan	6.9	Mali	6.9
Mozambiq	7.0	GDR	7.0	Syria	6.9	Czech.	7.0	Benin	6.9	Burundi	6.9
Myanmar	7.0	Guinea	7.0	Albania	7.0	GDR	7.0	Congo	6.9	Myanmar	7.0
Romania	7.0	Mali	7.0	Angola	7.0	Guinea	7.0	GDR	6.9	Benin	7.0
Rwanda	7.0	Myanmar	7.0	Burundi	7.0	Iraq	7.0	Guinea	6.9	GDR	7.0
Syria	7.0	Niger	7.0	Cuba	7.0	Mali	7.0	Albania	7.0	Guinea	7.0
Thailand	7.0	Romania	7.0	Iraq	7.0	Romania	7.0	Angola	7.0	Romania	7.0
Togo	7.0	Somalia	7.0	Myanmar	7.0	Somalia	7.0	Myanmar	7.0	Albania	7.0
UAE	7.0	Togo	7.0	Somalia	7.0	Togo	7.0	Somalia	7.0	Somalia	7.0

APPENDIX C - Human Development Index (HDI) Values*
Part 1. All Countries (Alphabetical Order)

Country	HDI 1970	HDI 1980	HDI 1990	HDI 1970/80	HDI 1980/90	HDI 1970/90
Afghanistan	0.131	0.165	0.208	0.034	0.043	0.077
Albania	0.497	0.603	0.714	0.106	0.111	0.217
Algeria	0.323	0.476	0.553	0.153	0.077	0.230
Angola	0.195	0.212	0.271	0.017	0.059	0.076
Argentina	0.748	0.790	0.853	0.042	0.063	0.105
Australia	0.862	0.890	0.926	0.028	0.036	0.064
Austria	0.857	0.880	0.917	0.023	0.037	0.060
Bangladesh	0.199	0.234	0.309	0.035	0.075	0.110
Barbados	0.824	0.856	0.894	0.032	0.038	0.070
Belgium	0.851	0.873	0.916	0.022	0.043	0.065
Benin	0.162	0.197	0.261	0.035	0.064	0.099
Bolivia	0.369	0.442	0.530	0.073	0.088	0.161
Botswana	0.284	0.414	0.670	0.130	0.256	0.386
Brazil	0.507	0.673	0.756	0.166	0.083	0.249
Bulgaria	0.686	0.823	0.815	0.137	-0.008	0.129
Burkina Faso	0.116	0.151	0.203	0.035	0.052	0.087
Burundi	0.157	0.219	0.276	0.062	0.057	0.119
Cameroon	0.253	0.332	0.447	0.079	0.115	0.194
Canada	0.887	0.911	0.932	0.024	0.021	0.045
Cen. Afr. Rep.	0.196	0.226	0.249	0.030	0.023	0.053
Chad	0.135	0.151	0.212	0.016	0.061	0.077
Chile	0.682	0.753	0.848	0.071	0.095	0.166
China	0.372	0.457	0.644	0.085	0.187	0.272
Colombia	0.554	0.656	0.813	0.102	0.157	0.259
Congo	0.307	0.368	0.461	0.061	0.093	0.154
Costa Rica	0.647	0.746	0.848	0.099	0.102	0.201
Cuba	0.582	0.719	0.666	0.099	-0.053	0.084
Cyprus	0.733	0.844	0.873	0.111	0.029	0.140
Czech.	0.746	0.848	0.872	0.102	0.024	0.126
Denmark	0.879	0.888	0.912	0.009	0.024	0.033
Dominican Rep.	0.455	0.541	0.638	0.086	0.097	0.183
Ecuador	0.485	0.613	0.718	0.128	0.105	0.233
Egypt	0.269	0.360	0.551	0.091	0.191	0.282
El Salvador	0.422	0.454	0.543	0.032	0.089	0.121
Finland	0.855	0.880	0.911	0.025	0.031	0.056
France	0.871	0.895	0.927	0.024	0.032	0.056
Gabon	0.378	0.468	0.525	0.090	0.057	0.147
Gambia	0.107	0.148	0.215	0.041	0.067	0.108
GDR	0.766	0.859	0.899	0.093	0.040	0.133
Germany, W.	0.856	0.881	0.918	0.025	0.037	0.062
Ghana	0.283	0.323	0.382	0.040	0.059	0.099
Greece	0.723	0.839	0.874	0.116	0.035	0.151
Guatemala	0.392	0.477	0.564	0.085	0.087	0.172
Guinea	0.111	0.148	0.191	0.037	0.043	0.080
Haiti	0.218	0.295	0.354	0.077	0.059	0.136

Appendix C, Part 1. (cont'd)

Country	HDI 1970	HDI 1980	HDI 1990	HDI 1970/80	HDI 1980/90	HDI 1970/90
Honduras	0.35	0.435	0.524	0.085	0.089	0.174
Hong Kong	0.737	0.830	0.875	0.093	0.045	0.138
Hungary	0.705	0.838	0.863	0.133	0.025	0.158
Iceland	0.863	0.890	0.914	0.027	0.024	0.051
India	0.254	0.296	0.382	0.042	0.086	0.128
Indonesia	0.306	0.418	0.586	0.112	0.168	0.280
Iran	0.406	0.497	0.672	0.091	0.175	0.266
Iraq	0.452	0.581	0.614	0.129	0.033	0.162
Ireland	0.829	0.862	0.892	0.033	0.030	0.063
Israel	0.827	0.862	0.900	0.035	0.038	0.073
Italy	0.831	0.857	0.891	0.026	0.034	0.060
Ivory Coast	0.243	0.330	0.370	0.087	0.040	0.127
Jamaica	0.662	0.654	0.749	-0.008	0.095	0.087
Japan	0.875	0.906	0.929	0.031	0.023	0.054
Jordan	0.405	0.553	0.628	0.148	0.075	0.223
Kenya	0.254	0.340	0.434	0.086	0.094	0.180
Korea, S.	0.523	0.666	0.859	0.143	0.193	0.336
Kuwait	0.684	0.769	0.804	0.085	0.040	0.125
Lesotho	0.307	0.404	0.476	0.097	0.072	0.169
Liberia	0.229	0.277	0.317	0.048	0.040	0.088
Libya	0.403	0.676	0.703	0.273	0.027	0.300
Luxembourg	0.843	0.869	0.908	0.026	0.039	0.065
Madagascar	0.291	0.344	0.396	0.053	0.052	0.105
Malawi	0.176	0.216	0.260	0.040	0.044	0.084
Malaysia	0.471	0.687	0.794	0.216	0.107	0.323
Mali	0.102	0.146	0.214	0.044	0.068	0.112
Malta	0.615	0.802	0.843	0.187	0.041	0.228
Mauritius	0.524	0.626	0.778	0.102	0.152	0.254
Mexico	0.642	0.758	0.804	0.116	0.046	0.162
Morocco	0.282	0.383	0.549	0.101	0.166	0.267
Mozambique	0.248	0.247	0.252	-0.001	0.005	0.004
Myanmar	0.318	0.356	0.406	0.038	0.050	0.088
Nepal	0.162	0.209	0.289	0.047	0.080	0.127
Netherlands	0.867	0.888	0.923	0.021	0.035	0.056
New Zealand	0.861	0.877	0.907	0.016	0.030	0.046
Nicaragua	0.462	0.534	0.583	0.072	0.049	0.121
Niger	0.134	0.163	0.209	0.029	0.046	0.075
Nigeria	0.23	0.297	0.348	0.067	0.051	0.118
Norway	0.878	0.901	0.928	0.023	0.027	0.050
Pakistan	0.244	0.287	0.393	0.043	0.106	0.149
Panama	0.592	0.687	0.816	0.095	0.129	0.224
Papua New G.	0.325	0.348	0.408	0.023	0.060	0.083
Paraguay	0.511	0.602	0.679	0.091	0.077	0.168
Peru	0.528	0.590	0.642	0.062	0.052	0.114
Philippines	0.489	0.557	0.621	0.068	0.064	0.132
Poland	0.679	0.836	0.815	0.157	-0.021	0.136

Appendix C, Part 1. (cont'd)

Country	HDI 1970	HDI 1980	HDI 1990	HDI 1970/80	HDI 1980/90	HDI 1970/90
Portugal	0.588	0.736	0.838	0.148	0.102	0.250
Romania	0.597	0.766	0.729	0.148	-0.037	0.132
Rwanda	0.215	0.244	0.274	0.029	0.030	0.059
Saudi Arabia	0.511	0.629	0.742	0.118	0.113	0.231
Senegal	0.176	0.233	0.322	0.057	0.089	0.146
Sierra Leone	0.155	0.177	0.209	0.022	0.032	0.054
Singapore	0.682	0.780	0.836	0.098	0.056	0.154
Somalia	0.124	0.162	0.217	0.038	0.055	0.093
South Africa	0.591	0.629	0.650	0.038	0.021	0.059
Spain	0.82	0.851	0.888	0.031	0.037	0.068
Sri Lanka	0.506	0.552	0.665	0.046	0.113	0.159
Sudan	0.188	0.229	0.276	0.041	0.047	0.088
Sweden	0.881	0.899	0.928	0.018	0.029	0.047
Switzerland	0.872	0.897	0.931	0.025	0.034	0.059
Syria	0.419	0.658	0.727	0.239	0.069	0.308
Tanzania	0.211	0.282	0.306	0.071	0.024	0.095
Thailand	0.465	0.551	0.798	0.086	0.247	0.333
Togo	0.183	0.255	0.311	0.072	0.056	0.128
Trinidad & T.	0.789	0.816	0.855	0.027	0.039	0.066
Tunisia	0.34	0.499	0.690	0.159	0.191	0.350
Turkey	0.441	0.549	0.739	0.108	0.190	0.298
UAE	0.601	0.719	0.771	0.118	0.052	0.170
Uganda	0.213	0.215	0.272	0.002	0.057	0.059
UK	0.873	0.892	0.919	0.019	0.027	0.046
Uruguay	0.762	0.830	0.859	0.068	0.029	0.097
USA	0.881	0.905	0.925	0.024	0.020	0.044
USSR	0.714	0.841	0.858	0.127	0.017	0.144
Venezuela	0.728	0.784	0.820	0.056	0.036	0.092
Yugoslavia	0.581	0.789	0.861	0.208	0.072	0.280
Zaire	0.235	0.286	0.341	0.051	0.055	0.106
Zambia	0.315	0.342	0.352	0.027	0.010	0.037
Zimbabwe	0.326	0.386	0.474	0.060	0.088	0.148

*Notes. See Technical Note 2 for the details concerning the construction of the Human Development Index (HDI) and the sources used. The HDI is based on a scale from 1.000 (highest possible value) to 0.000 (lowest possible value).

Appendix C (cont'd) **Part 2. Country Ranks By HDI Values (1970, 1980, 1990)**

Ra	Country	HDI 1970	Ra	Country	HDI 1980	Ra	Country	HDI 1990
1	Canada	0.887	1	Canada	0.911	1	Canada	0.932
2	Sweden	0.881	2	Japan	0.906	2	Switzerland	0.931
3	USA	0.881	3	USA	0.905	3	Japan	0.929
4	Denmark	0.879	4	Norway	0.901	4	Norway	0.928
5	Norway	0.878	5	Sweden	0.899	5	Sweden	0.928
6	Japan	0.875	6	Switzerland	0.897	6	France	0.927
7	UK	0.873	7	France	0.895	7	Australia	0.926
8	Switzerland	0.872	8	UK	0.892	8	USA	0.925
9	France	0.871	9	Australia	0.890	9	Netherlands	0.923
10	Netherlands	0.867	10	Iceland	0.890	10	UK	0.919
11	Iceland	0.863	11	Denmark	0.888	11	Germany, W.	0.918
12	Australia	0.862	12	Netherlands	0.888	12	Austria	0.917
13	New Zealand	0.861	13	Germany, W.	0.881	13	Belgium	0.916
14	Austria	0.857	14	Austria	0.880	14	Iceland	0.914
15	Germany, W.	0.856	15	Finland	0.880	15	Denmark	0.912
16	Finland	0.855	16	New Zealand	0.877	16	Finland	0.911
17	Belgium	0.851	17	Belgium	0.873	17	Luxembourg	0.908
18	Luxembourg	0.843	18	Luxembourg	0.869	18	New Zealand	0.907
19	Italy	0.831	19	Ireland	0.862	19	Israel	0.900
20	Ireland	0.829	20	Israel	0.862	20	GDR	0.899
21	Israel	0.827	21	GDR	0.859	21	Barbados	0.894
22	Barbados	0.824	22	Italy	0.857	22	Ireland	0.892
23	Spain	0.820	23	Barbados	0.856	23	Italy	0.891
24	Trinidad & T.	0.789	24	Spain	0.851	24	Spain	0.888
25	GDR	0.766	25	Czech.	0.848	25	Hong Kong	0.875
26	Uruguay	0.762	26	Cyprus	0.844	26	Greece	0.874
27	Argentina	0.748	27	USSR	0.841	27	Cyprus	0.873
28	Czech.	0.746	28	Greece	0.839	28	Czech.	0.872
29	Hong Kong	0.737	29	Hungary	0.838	29	Hungary	0.863
30	Cyprus	0.733	30	Poland	0.836	30	Yugoslavia	0.861
31	Venezuela	0.728	31	Hong Kong	0.830	31	Korea, S.	0.859
32	Greece	0.723	32	Uruguay	0.830	32	Uruguay	0.859
33	USSR	0.714	33	Bulgaria	0.823	33	USSR	0.858
34	Hungary	0.705	34	Trinidad & T.	0.816	34	Trinidad & T.	0.855
35	Bulgaria	0.686	35	Malta	0.802	35	Argentina	0.853
36	Kuwait	0.684	36	Argentina	0.790	36	Chile	0.848
37	Chile	0.682	37	Yugoslavia	0.789	37	Costa Rica	0.848
38	Singapore	0.682	38	Venezuela	0.784	38	Malta	0.843
39	Poland	0.679	39	Singapore	0.780	39	Portugal	0.838
40	Jamaica	0.662	40	Kuwait	0.769	40	Singapore	0.836
41	Costa Rica	0.647	41	Romania	0.766	41	Venezuela	0.820
42	Mexico	0.642	42	Mexico	0.758	42	Panama	0.816
43	Malta	0.615	43	Chile	0.753	43	Bulgaria	0.815
44	UAE	0.601	44	Costa Rica	0.746	44	Poland	0.815
45	Romania	0.597	45	Portugal	0.736	45	Colombia	0.813
46	Panama	0.592	46	Cuba	0.719	46	Kuwait	0.804
47	South Africa	0.591	47	UAE	0.719	47	Mexico	0.804

Appendix C, Part 2. (cont'd)

Ra	Country	HDI 1970	Ra	Country	HDI 1980	Ra	Country	HDI 1990
48	Portugal	0.588	48	Malaysia	0.687	48	Thailand	0.798
49	Cuba	0.582	49	Panama	0.687	49	Malaysia	0.794
50	Yugoslavia	0.581	50	Libya	0.676	50	Mauritius	0.778
51	Colombia	0.554	51	Brazil	0.673	51	UAE	0.771
52	Peru	0.528	52	Korea, S.	0.666	52	Brazil	0.756
53	Mauritius	0.524	53	Syria	0.658	53	Jamaica	0.749
54	Korea, S.	0.523	54	Colombia	0.656	54	Saudi Arabia	0.742
55	Paraguay	0.511	55	Jamaica	0.654	55	Turkey	0.739
56	Saudi Arabia	0.511	56	Saudi Arabia	0.629	56	Romania	0.729
57	Brazil	0.507	57	South Africa	0.629	57	Syria	0.727
58	Sri Lanka	0.506	58	Mauritius	0.626	58	Ecuador	0.718
59	Albania	0.497	59	Ecuador	0.613	59	Albania	0.714
60	Philippines	0.489	60	Albania	0.603	60	Libya	0.703
61	Ecuador	0.485	61	Paraguay	0.602	61	Tunisia	0.690
62	Malaysia	0.471	62	Peru	0.590	62	Paraguay	0.679
63	Thailand	0.465	63	Iraq	0.581	63	Iran	0.672
64	Nicaragua	0.462	64	Philippines	0.557	64	Botswana	0.670
65	Domin. Rep.	0.455	65	Jordan	0.553	65	Cuba	0.666
66	Iraq	0.452	66	Sri Lanka	0.552	66	Sri Lanka	0.665
67	Turkey	0.441	67	Thailand	0.551	67	South Africa	0.650
68	El Salvador	0.422	68	Turkey	0.549	68	China	0.644
69	Syria	0.419	69	Domin. Rep.	0.541	69	Peru	0.642
70	Iran	0.406	70	Nicaragua	0.534	70	Domin. Rep.	0.638
71	Jordan	0.405	71	Tunisia	0.499	71	Jordan	0.628
72	Libya	0.403	72	Iran	0.497	72	Philippines	0.621
73	Guatemala	0.392	73	Guatemala	0.477	73	Iraq	0.614
74	Gabon	0.378	74	Algeria	0.476	74	Indonesia	0.586
75	China	0.372	75	Gabon	0.468	75	Nicaragua	0.583
76	Bolivia	0.369	76	China	0.457	76	Guatemala	0.564
77	Honduras	0.350	77	El Salvador	0.454	77	Algeria	0.553
78	Tunisia	0.340	78	Bolivia	0.442	78	Egypt	0.551
79	Zimbabwe	0.326	79	Honduras	0.435	79	Morocco	0.549
80	Papua New G.	0.325	80	Indonesia	0.418	80	El Salvador	0.543
81	Algeria	0.323	81	Botswana	0.414	81	Bolivia	0.530
82	Myanmar	0.318	82	Lesotho	0.404	82	Gabon	0.525
83	Zambia	0.315	83	Zimbabwe	0.386	83	Honduras	0.524
84	Congo	0.307	84	Morocco	0.383	84	Lesotho	0.476
85	Lesotho	0.307	85	Congo	0.368	85	Zimbabwe	0.474
86	Indonesia	0.306	86	Egypt	0.360	86	Congo	0.461
87	Madagascar	0.291	87	Myanmar	0.356	87	Cameroon	0.447
88	Botswana	0.284	88	Papua New G.	0.348	88	Kenya	0.434
89	Ghana	0.283	89	Madagascar	0.344	89	Papua New G.	0.408
90	Morocco	0.282	90	Zambia	0.342	90	Myanmar	0.406
91	Egypt	0.269	91	Kenya	0.340	91	Madagascar	0.396
92	India	0.254	92	Cameroon	0.332	92	Pakistan	0.393
93	Kenya	0.254	93	Ivory Coast	0.330	93	Ghana	0.382
94	Cameroon	0.253	94	Ghana	0.323	94	India	0.382

Appendix C, Part 2. (cont'd)

Ra	Country	HDI 1970	Ra	Country	HDI 1980	Ra	Country	HDI 1990
95	Mozambique	0.248	95	Nigeria	0.297	95	Ivory Coast	0.370
96	Pakistan	0.244	96	India	0.296	96	Haiti	0.354
97	Ivory Coast	0.243	97	Haiti	0.295	97	Zambia	0.352
98	Zaire	0.235	98	Pakistan	0.287	98	Nigeria	0.348
99	Nigeria	0.230	99	Zaire	0.286	99	Zaire	0.341
100	Liberia	0.229	100	Tanzania	0.282	100	Senegal	0.322
101	Haiti	0.218	101	Liberia	0.277	101	Liberia	0.317
102	Rwanda	0.215	102	Togo	0.255	102	Togo	0.311
103	Uganda	0.213	103	Mozambique	0.247	103	Bangladesh	0.309
104	Tanzania	0.211	104	Rwanda	0.244	104	Tanzania	0.306
105	Bangladesh	0.199	105	Bangladesh	0.234	105	Nepal	0.289
106	Cen. Afr. Rep.	0.196	106	Senegal	0.233	106	Burundi	0.276
107	Angola	0.195	107	Sudan	0.229	107	Sudan	0.276
108	Sudan	0.188	108	Cen. Afr. Rep.	0.226	108	Rwanda	0.274
109	Togo	0.183	109	Burundi	0.219	109	Uganda	0.272
110	Malawi	0.176	110	Malawi	0.216	110	Angola	0.271
111	Senegal	0.176	111	Uganda	0.215	111	Benin	0.261
112	Benin	0.162	112	Angola	0.212	112	Malawi	0.260
113	Nepal	0.162	113	Nepal	0.209	113	Mozambique	0.252
114	Burundi	0.157	114	Benin	0.197	114	Cen. Afr. Rep.	0.249
115	Sierra Leone	0.155	115	Sierra Leone	0.177	115	Somalia	0.217
116	Chad	0.135	116	Afghanistan	0.165	116	Gambia	0.215
117	Niger	0.134	117	Niger	0.163	117	Mali	0.214
118	Afghanistan	0.131	118	Somalia	0.162	118	Chad	0.212
119	Somalia	0.124	119	Burkina Faso	0.151	119	Niger	0.209
120	Burkina Faso	0.116	120	Chad	0.151	120	Sierra Leone	0.209
121	Guinea	0.111	121	Gambia	0.148	121	Afghanistan	0.208
122	Gambia	0.107	122	Guinea	0.148	122	Burkina Faso	0.203
123	Mali	0.102	123	Mali	0.146	123	Guinea	0.191

APPENDIX D - Index of Social Conditions (ISC) Values*
Part 1. All Countries (Alphabetical Order)

Country	ISC 1970	ISC 1980	ISC 1990	ISC 1970/80	ISC 1980/90	ISC 1970/90
Afghanistan	0.496	0.283	0.225	-0.212	-0.059	-0.271
Albania	0.614	0.650	0.682	0.036	0.032	0.068
Algeria	0.579	0.587	0.639	0.008	0.052	0.059
Angola	0.342	0.258	0.120	-0.084	-0.138	-0.222
Argentina	0.681	0.469	0.690	-0.213	0.222	0.009
Australia	0.905	0.880	0.916	-0.025	0.036	0.010
Austria	0.889	0.896	0.928	0.008	0.032	0.040
Bangladesh	0.415	0.418	0.465	0.004	0.047	0.051
Barbados	0.857	0.868	0.910	0.011	0.042	0.053
Belgium	0.903	0.906	0.936	0.003	0.029	0.033
Benin	0.611	0.581	0.609	-0.030	0.028	-0.001
Bolivia	0.644	0.594	0.545	-0.051	-0.049	-0.100
Botswana	0.652	0.683	0.754	0.031	0.072	0.102
Brazil	0.490	0.578	0.601	0.087	0.023	0.110
Bulgaria	0.680	0.693	0.730	0.013	0.036	0.049
Burkina Faso	0.599	0.580	0.577	-0.019	-0.003	-0.022
Burundi	0.319	0.520	0.563	0.201	0.042	0.244
Cameroon	0.625	0.556	0.594	-0.069	0.038	-0.031
Canada	0.913	0.918	0.967	0.005	0.049	0.054
Cen. Afr. Rep.	0.512	0.527	0.568	0.014	0.042	0.056
Chad	0.401	0.442	0.489	0.041	0.047	0.088
Chile	0.560	0.550	0.759	-0.010	0.209	0.199
China	0.408	0.469	0.583	0.060	0.114	0.175
Colombia	0.737	0.627	0.636	-0.111	0.009	-0.101
Congo	0.573	0.611	0.652	0.038	0.041	0.079
Costa Rica	0.837	0.826	0.803	-0.011	-0.024	-0.035
Cuba	0.644	0.737	0.728	0.093	-0.009	0.084
Cyprus	0.729	0.798	0.888	0.069	0.090	0.158
Czech.	0.646	0.753	0.790	0.107	0.036	0.143
Denmark	0.892	0.905	0.931	0.014	0.025	0.039
Dominican Rep.	0.702	0.718	0.688	0.016	-0.030	-0.014
Ecuador	0.709	0.762	0.676	0.053	-0.086	-0.033
Egypt	0.379	0.621	0.704	0.242	0.084	0.325
El Salvador	0.661	0.503	0.498	-0.157	-0.005	-0.162
Finland	0.862	0.865	0.928	0.003	0.063	0.066
France	0.865	0.862	0.899	-0.003	0.038	0.035
Gabon	0.557	0.530	0.638	-0.027	0.108	0.081
Gambia	0.655	0.623	0.619	-0.031	-0.004	-0.035
GDR	0.733	0.744	0.772	0.012	0.028	0.040
Germany, W.	0.902	0.883	0.919	-0.019	0.036	0.017
Ghana	0.577	0.535	0.497	-0.042	-0.038	-0.080
Greece	0.630	0.802	0.820	0.172	0.018	0.190
Guatemala	0.564	0.514	0.568	-0.050	0.055	0.005
Guinea	0.499	0.507	0.491	0.009	-0.017	-0.008

Appendix D, Part 1. (cont'd)

Country	ISC 1970	ISC 1980	ISC 1990	ISC 1970/80	ISC 1980/90	ISC 1970/90
Haiti	0.571	0.581	0.642	0.010	0.062	0.071
Honduras	0.629	0.696	0.737	0.067	0.041	0.108
Hong Kong	0.845	0.842	0.863	-0.004	0.022	0.018
Hungary	0.706	0.758	0.808	0.052	0.051	0.102
Iceland	0.895	0.784	0.817	-0.112	0.034	-0.078
India	0.460	0.559	0.551	0.099	-0.008	0.091
Indonesia	0.235	0.385	0.617	0.150	0.232	0.382
Iran	0.607	0.375	0.460	-0.232	0.085	-0.148
Iraq	0.390	0.356	0.427	-0.034	0.071	0.037
Ireland	0.842	0.863	0.913	0.021	0.050	0.071
Israel	0.614	0.670	0.635	0.056	-0.035	0.021
Italy	0.841	0.825	0.893	-0.016	0.068	0.052
Ivory Coast	0.567	0.582	0.640	0.015	0.058	0.073
Jamaica	0.816	0.714	0.782	-0.102	0.067	-0.034
Japan	0.892	0.905	0.938	0.013	0.033	0.046
Jordan	0.433	0.688	0.750	0.255	0.063	0.318
Kenya	0.658	0.645	0.590	-0.013	-0.055	-0.068
Korea, S.	0.602	0.648	0.839	0.046	0.192	0.237
Kuwait	0.772	0.766	0.677	-0.006	-0.090	-0.095
Lesotho	0.643	0.600	0.634	-0.043	0.034	-0.009
Liberia	0.536	0.548	0.474	0.013	-0.074	-0.062
Libya	0.532	0.559	0.611	0.027	0.052	0.079
Luxembourg	0.864	0.875	0.889	0.011	0.014	0.025
Madagascar	0.634	0.538	0.589	-0.096	0.051	-0.045
Malawi	0.503	0.472	0.486	-0.031	0.014	-0.016
Malaysia	0.720	0.682	0.722	-0.038	0.040	0.002
Mali	0.483	0.492	0.529	0.008	0.038	0.046
Malta	0.843	0.826	0.889	-0.017	0.063	0.045
Mauritius	0.787	0.710	0.815	-0.077	0.105	0.028
Mexico	0.732	0.695	0.588	-0.037	-0.108	-0.145
Morocco	0.654	0.579	0.614	-0.076	0.036	-0.040
Mozambique	0.342	0.296	0.170	-0.046	-0.126	-0.172
Myanmar	0.592	0.535	0.487	-0.057	-0.048	-0.105
Nepal	0.557	0.603	0.605	0.046	0.002	0.047
Netherlands	0.893	0.905	0.942	0.012	0.037	0.049
New Zealand	0.898	0.880	0.908	-0.018	0.028	0.010
Nicaragua	0.653	0.460	0.449	-0.193	-0.010	-0.204
Niger	0.532	0.516	0.573	-0.016	0.057	0.042
Nigeria	0.431	0.571	0.594	0.141	0.023	0.164
Norway	0.899	0.906	0.935	0.007	0.028	0.036
Pakistan	0.401	0.508	0.634	0.107	0.126	0.233
Panama	0.671	0.749	0.731	0.078	-0.018	0.060
Papua New G.	0.707	0.715	0.738	0.008	0.022	0.031
Paraguay	0.636	0.649	0.639	0.013	-0.010	0.003
Peru	0.623	0.560	0.477	-0.063	-0.084	-0.147
Philippines	0.517	0.501	0.620	-0.016	0.120	0.103

Appendix D, Part 1. (cont'd)

Country	ISC 1970	ISC 1980	ISC 1990	ISC 1970/80	ISC 1980/90	ISC 1970/90
Poland	0.709	0.777	0.640	0.068	-0.137	-0.069
Portugal	0.478	0.777	0.807	0.299	0.030	0.329
Romania	0.686	0.721	0.653	0.034	-0.068	-0.034
Rwanda	0.509	0.506	0.506	-0.003	-0.000	-0.003
Saudi Arabia	0.567	0.527	0.558	-0.041	0.032	-0.009
Senegal	0.563	0.619	0.658	0.056	0.039	0.095
Sierra Leone	0.556	0.537	0.401	-0.019	-0.136	-0.155
Singapore	0.751	0.749	0.796	-0.002	0.047	0.045
Somalia	0.418	0.332	0.148	-0.087	-0.183	-0.270
South Africa	0.620	0.557	0.588	-0.064	0.031	-0.033
Spain	0.673	0.800	0.897	0.128	0.097	0.224
Sri Lanka	0.685	0.677	0.574	-0.007	-0.103	-0.111
Sudan	0.339	0.348	0.258	0.009	-0.090	-0.081
Sweden	0.910	0.907	0.920	-0.004	0.014	0.010
Switzerland	0.879	0.907	0.922	0.028	0.014	0.043
Syria	0.391	0.433	0.560	0.041	0.127	0.168
Tanzania	0.566	0.477	0.501	-0.088	0.023	-0.065
Thailand	0.616	0.663	0.730	0.047	0.067	0.114
Togo	0.606	0.570	0.599	-0.037	0.029	-0.007
Trinidad & T.	0.789	0.788	0.882	-0.001	0.094	0.093
Tunisia	0.626	0.655	0.738	0.030	0.082	0.112
Turkey	0.592	0.513	0.491	-0.079	-0.022	-0.101
UAE	0.556	0.689	0.758	0.133	0.069	0.203
Uganda	0.336	0.211	0.252	-0.125	0.041	-0.084
UK	0.855	0.825	0.874	-0.031	0.049	0.019
Uruguay	0.585	0.553	0.695	-0.032	0.142	0.110
USA	0.741	0.896	0.867	0.154	-0.028	0.126
USSR	0.696	0.527	0.595	-0.169	0.068	-0.101
Venezuela	0.817	0.794	0.752	-0.023	-0.042	-0.065
Yugoslavia	0.640	0.696	0.394	0.056	-0.303	-0.247
Zaire	0.461	0.482	0.411	0.022	-0.071	-0.049
Zambia	0.600	0.593	0.508	-0.007	-0.084	-0.091
Zimbabwe	0.578	0.547	0.606	-0.031	0.059	0.028

*Notes. See Technical Note 3 (section 1) for the details concerning the construction of the Index of Social Conditions (ISC) and the sources used. The ISC is based on a scale from 1.000 (highest possible value) to 0.000 (lowest possible value).

Appendix D (cont'd) **Part 2. Country Ranks By ISC Values (1970, 1980, 1990)**

Ra	Country	ISC 1970	Ra	Country	ISC 1980	Ra	Country	ISC 1990
1	Canada	0.913	1	Canada	0.918	1	Canada	0.967
2	Sweden	0.910	2	Switzerland	0.907	2	Netherlands	0.942
3	Australia	0.905	3	Sweden	0.907	3	Japan	0.938
4	Belgium	0.903	4	Norway	0.906	4	Belgium	0.936
5	Germany, W.	0.902	5	Belgium	0.906	5	Norway	0.935
6	Norway	0.899	6	Denmark	0.905	6	Denmark	0.931
7	New Zealand	0.898	7	Japan	0.905	7	Austria	0.928
8	Iceland	0.895	8	Netherlands	0.905	8	Finland	0.928
9	Netherlands	0.893	9	Austria	0.896	9	Switzerland	0.922
10	Japan	0.892	10	USA	0.896	10	Sweden	0.920
11	Denmark	0.892	11	Germany, W.	0.883	11	Germany, W.	0.919
12	Austria	0.889	12	Australia	0.880	12	Australia	0.916
13	Switzerland	0.879	13	New Zealand	0.880	13	Ireland	0.913
14	France	0.865	14	Luxembourg	0.875	14	Barbados	0.910
15	Luxembourg	0.864	15	Barbados	0.868	15	New Zealand	0.908
16	Finland	0.862	16	Finland	0.865	16	France	0.899
17	Barbados	0.857	17	Ireland	0.863	17	Spain	0.897
18	UK	0.855	18	France	0.862	18	Italy	0.893
19	Hong Kong	0.845	19	Hong Kong	0.842	19	Malta	0.889
20	Malta	0.843	20	Costa Rica	0.826	20	Luxembourg	0.889
21	Ireland	0.842	21	Malta	0.826	21	Cyprus	0.888
22	Italy	0.841	22	UK	0.825	22	Trinidad & T.	0.882
23	Costa Rica	0.837	23	Italy	0.825	23	UK	0.874
24	Venezuela	0.817	24	Greece	0.802	24	USA	0.867
25	Jamaica	0.816	25	Spain	0.800	25	Hong Kong	0.863
26	Trinidad & T.	0.789	26	Cyprus	0.798	26	Korea, S.	0.839
27	Mauritius	0.787	27	Venezuela	0.794	27	Greece	0.820
28	Kuwait	0.772	28	Trinidad & T.	0.788	28	Iceland	0.817
29	Singapore	0.751	29	Iceland	0.784	29	Mauritius	0.815
30	USA	0.741	30	Poland	0.777	30	Hungary	0.808
31	Colombia	0.737	31	Portugal	0.777	31	Portugal	0.807
32	GDR	0.733	32	Kuwait	0.766	32	Costa Rica	0.803
33	Mexico	0.732	33	Ecuador	0.762	33	Singapore	0.796
34	Cyprus	0.729	34	Hungary	0.758	34	Czech.	0.790
35	Malaysia	0.720	35	Czech.	0.753	35	Jamaica	0.782
36	Poland	0.709	36	Singapore	0.749	36	GDR	0.772
37	Ecuador	0.709	37	Panama	0.749	37	Chile	0.759
38	Papua New G.	0.707	38	GDR	0.744	38	UAE	0.758
39	Hungary	0.706	39	Cuba	0.737	39	Botswana	0.754
40	Domin. Rep.	0.702	40	Romania	0.721	40	Venezuela	0.752
41	USSR	0.696	41	Domin. Rep.	0.718	41	Jordan	0.750
42	Romania	0.686	42	Papua New G.	0.715	42	Tunisia	0.738
43	Sri Lanka	0.685	43	Jamaica	0.714	43	Papua New G.	0.738
44	Argentina	0.681	44	Mauritius	0.710	44	Honduras	0.737
45	Bulgaria	0.680	45	Yugoslavia	0.696	45	Panama	0.731
46	Spain	0.673	46	Honduras	0.696	46	Thailand	0.730

Appendix D, Part 2. (cont'd)

Ra	Country	ISC 1970	Ra	Country	ISC 1980	Ra	Country	ISC 1990
47	Panama	0.671	47	Mexico	0.695	47	Bulgaria	0.730
48	El Salvador	0.661	48	Bulgaria	0.693	48	Cuba	0.728
49	Kenya	0.658	49	UAE	0.689	49	Malaysia	0.722
50	Gambia	0.655	50	Jordan	0.688	50	Egypt	0.704
51	Morocco	0.654	51	Botswana	0.683	51	Uruguay	0.695
52	Nicaragua	0.653	52	Malaysia	0.682	52	Argentina	0.690
53	Botswana	0.652	53	Sri Lanka	0.677	53	Domin. Rep.	0.688
54	Czech.	0.646	54	Israel	0.670	54	Albania	0.682
55	Bolivia	0.644	55	Thailand	0.663	55	Kuwait	0.677
56	Cuba	0.644	56	Tunisia	0.655	56	Ecuador	0.676
57	Lesotho	0.643	57	Albania	0.650	57	Senegal	0.658
58	Yugoslavia	0.640	58	Paraguay	0.649	58	Romania	0.653
59	Paraguay	0.636	59	Korea, S.	0.648	59	Congo	0.652
60	Madagascar	0.634	60	Kenya	0.645	60	Haiti	0.642
61	Greece	0.630	61	Colombia	0.627	61	Ivory Coast	0.640
62	Honduras	0.629	62	Gambia	0.623	62	Poland	0.640
63	Tunisia	0.626	63	Egypt	0.621	63	Paraguay	0.639
64	Cameroon	0.625	64	Senegal	0.619	64	Algeria	0.639
65	Peru	0.623	65	Congo	0.611	65	Gabon	0.638
66	South Africa	0.620	66	Nepal	0.603	66	Colombia	0.636
67	Thailand	0.616	67	Lesotho	0.600	67	Israel	0.635
68	Albania	0.614	68	Bolivia	0.594	68	Lesotho	0.634
69	Israel	0.614	69	Zambia	0.593	69	Pakistan	0.634
70	Benin	0.611	70	Algeria	0.587	70	Philippines	0.620
71	Iran	0.607	71	Ivory Coast	0.582	71	Gambia	0.619
72	Togo	0.606	72	Benin	0.581	72	Indonesia	0.617
73	Korea, S.	0.602	73	Haiti	0.581	73	Morocco	0.614
74	Zambia	0.600	74	Burkina Faso	0.580	74	Libya	0.611
75	Burkina Faso	0.599	75	Morocco	0.579	75	Benin	0.609
76	Turkey	0.592	76	Brazil	0.578	76	Zimbabwe	0.606
77	Myanmar	0.592	77	Nigeria	0.571	77	Nepal	0.605
78	Uruguay	0.585	78	Togo	0.570	78	Brazil	0.601
79	Algeria	0.579	79	Peru	0.560	79	Togo	0.599
80	Zimbabwe	0.578	80	Libya	0.559	80	USSR	0.595
81	Ghana	0.577	81	India	0.559	81	Nigeria	0.594
82	Congo	0.573	82	South Africa	0.557	82	Cameroon	0.594
83	Haiti	0.571	83	Cameroon	0.556	83	Kenya	0.590
84	Ivory Coast	0.567	84	Uruguay	0.553	84	Madagascar	0.589
85	Saudi Arabia	0.567	85	Chile	0.550	85	Mexico	0.588
86	Tanzania	0.566	86	Liberia	0.548	86	South Africa	0.588
87	Guatemala	0.564	87	Zimbabwe	0.547	87	China	0.583
88	Senegal	0.563	88	Madagascar	0.538	88	Burkina Faso	0.577
89	Chile	0.560	89	Sierra Leone	0.537	89	Sri Lanka	0.574
90	Nepal	0.557	90	Ghana	0.535	90	Niger	0.573
91	Gabon	0.557	91	Myanmar	0.535	91	Cen. Afr. Rep.	0.568

Appendix D, Part 2. (cont'd)

Ra	Country	ISC 1970	Ra	Country	ISC 1980	Ra	Country	ISC 1990
92	Sierra Leone	0.556	92	Gabon	0.530	92	Guatemala	0.568
93	UAE	0.556	93	Cen. Afr. Rep.	0.527	93	Burundi	0.563
94	Liberia	0.536	94	USSR	0.527	94	Syria	0.560
95	Libya	0.532	95	Saudi Arabia	0.527	95	Saudi Arabia	0.558
96	Niger	0.532	96	Burundi	0.520	96	India	0.551
97	Philippines	0.517	97	Niger	0.516	97	Bolivia	0.545
98	Cen. Afr. Rep.	0.512	98	Guatemala	0.514	98	Mali	0.529
99	Rwanda	0.509	99	Turkey	0.513	99	Zambia	0.508
100	Malawi	0.503	100	Pakistan	0.508	100	Rwanda	0.506
101	Guinea	0.499	101	Guinea	0.507	101	Tanzania	0.501
102	Afghanistan	0.496	102	Rwanda	0.506	102	El Salvador	0.498
103	Brazil	0.490	103	El Salvador	0.503	103	Ghana	0.497
104	Mali	0.483	104	Philippines	0.501	104	Turkey	0.491
105	Portugal	0.478	105	Mali	0.492	105	Guinea	0.491
106	Zaire	0.461	106	Zaire	0.482	106	Chad	0.489
107	India	0.460	107	Tanzania	0.477	107	Myanmar	0.487
108	Jordan	0.433	108	Malawi	0.472	108	Malawi	0.486
109	Nigeria	0.431	109	China	0.469	109	Peru	0.477
110	Somalia	0.418	110	Argentina	0.469	110	Liberia	0.474
111	Bangladesh	0.415	111	Nicaragua	0.460	111	Bangladesh	0.465
112	China	0.408	112	Chad	0.442	112	Iran	0.460
113	Pakistan	0.401	113	Syria	0.433	113	Nicaragua	0.449
114	Chad	0.401	114	Bangladesh	0.418	114	Iraq	0.427
115	Syria	0.391	115	Indonesia	0.385	115	Zaire	0.411
116	Iraq	0.390	116	Iran	0.375	116	Sierra Leone	0.401
117	Egypt	0.379	117	Iraq	0.356	117	Yugoslavia	0.394
118	Mozambique	0.342	118	Sudan	0.348	118	Sudan	0.258
119	Angola	0.342	119	Somalia	0.332	119	Uganda	0.252
120	Sudan	0.339	120	Mozambique	0.296	120	Afghanistan	0.225
121	Uganda	0.336	121	Afghanistan	0.283	121	Mozambique	0.170
122	Burundi	0.319	122	Angola	0.258	122	Somalia	0.148
123	Indonesia	0.235	123	Uganda	0.211	123	Angola	0.120

APPENDIX E - Security Index (SEC) Values*
All Countries (Alphabetical Order)

Country	SEC 1970	SEC 1980	SEC 1990	SEC 1970/80	SEC 1980/90	SEC 1970/90
Afghanistan	0.881	0.478	0.249	-0.403	-0.229	-0.632
Albania	0.996	0.996	1.000	0.000	0.004	0.004
Algeria	0.973	0.855	0.775	-0.118	-0.080	-0.198
Angola	0.467	0.290	0.000	-0.177	-0.290	-0.467
Argentina	0.683	0.265	0.500	-0.419	0.235	-0.183
Australia	0.969	0.882	0.930	-0.087	0.048	-0.039
Austria	0.963	0.935	0.964	-0.028	0.029	0.001
Bangladesh	0.463	0.383	0.559	-0.080	0.176	0.097
Barbados	0.935	0.865	0.948	-0.070	0.083	0.013
Belgium	0.964	0.922	0.958	-0.042	0.036	-0.006
Benin	0.981	0.897	0.984	-0.084	0.087	0.003
Bolivia	0.965	0.790	0.500	-0.175	-0.290	-0.465
Botswana	0.956	0.884	0.868	-0.072	-0.016	-0.088
Brazil	0.539	0.506	0.500	-0.033	-0.006	-0.039
Bulgaria	0.996	0.977	0.922	-0.019	-0.055	-0.074
Burkina Faso	0.987	0.914	0.962	-0.073	0.048	-0.025
Burundi	0.472	0.893	0.957	0.421	0.064	0.485
Cameroon	0.958	0.902	0.955	-0.056	0.053	-0.003
Canada	0.969	0.913	0.957	-0.056	0.044	-0.012
Cen. Afr. Rep.	0.959	0.879	0.949	-0.080	0.070	-0.010
Chad	0.761	0.730	0.805	-0.031	0.075	0.045
Chile	0.370	0.500	0.795	0.130	0.295	0.425
China	0.500	0.491	0.840	-0.009	0.349	0.340
Colombia	0.881	0.581	0.596	-0.300	0.015	-0.285
Congo	0.941	0.916	0.996	-0.025	0.080	0.055
Costa Rica	0.981	0.847	0.771	-0.134	-0.076	-0.210
Cuba	0.995	0.995	0.995	0.000	0.000	0.000
Cyprus	0.827	0.916	0.945	0.089	0.029	0.118
Czech.	0.896	0.988	0.965	0.092	-0.023	0.069
Denmark	0.936	0.899	0.948	-0.037	0.049	0.012
Dominican Rep.	0.855	0.909	0.755	0.054	-0.154	-0.100
Ecuador	0.939	0.862	0.620	-0.077	-0.242	-0.319
Egypt	0.474	0.904	0.875	0.430	-0.029	0.401
El Salvador	0.859	0.490	0.326	-0.369	-0.164	-0.533
Finland	0.940	0.877	0.934	-0.063	0.057	-0.006
France	0.958	0.898	0.943	-0.060	0.045	-0.015
Gabon	0.966	0.825	0.985	-0.141	0.160	0.019
Gambia	0.968	0.894	0.818	-0.074	-0.076	-0.150
GDR	0.999	1.000	1.000	0.001	0.000	0.001
Germany, W.	0.968	0.949	0.972	-0.019	0.023	0.004
Ghana	0.924	0.540	0.600	-0.384	0.060	-0.324
Greece	0.828	0.855	0.823	0.027	-0.032	-0.005
Guatemala	0.657	0.680	0.568	0.023	-0.112	-0.089
Guinea	0.985	0.956	0.778	-0.029	-0.178	-0.207

Appendix E (cont'd)

Country	SEC 1970	SEC 1980	SEC 1990	SEC 1970/80	SEC 1980/90	SEC 1970/90
Haiti	0.960	0.907	0.929	-0.053	0.022	-0.031
Honduras	0.835	0.919	0.932	0.084	0.013	0.097
Hong Kong	0.976	0.908	0.925	-0.068	0.017	-0.051
Hungary	0.974	0.972	0.897	-0.002	-0.075	-0.077
Iceland	0.974	0.649	0.700	-0.325	0.051	-0.274
India	0.429	0.608	0.550	0.179	-0.058	0.121
Indonesia	0.000	0.285	0.807	0.285	0.522	0.807
Iran	1.000	0.276	0.362	-0.724	0.086	-0.638
Iraq	0.483	0.321	0.397	-0.162	0.076	-0.086
Ireland	0.948	0.858	0.942	-0.090	0.084	-0.006
Israel	0.438	0.435	0.320	-0.003	-0.115	-0.118
Italy	0.956	0.844	0.905	-0.112	0.061	-0.051
Ivory Coast	0.972	0.870	0.962	-0.102	0.092	-0.010
Jamaica	0.960	0.719	0.804	-0.241	0.085	-0.156
Japan	0.949	0.915	0.985	-0.034	0.070	0.036
Jordan	0.473	0.932	0.984	0.459	0.052	0.511
Kenya	0.984	0.899	0.908	-0.085	0.009	-0.076
Korea, S.	0.825	0.799	0.944	-0.026	0.145	0.119
Kuwait	0.994	0.898	0.757	-0.096	-0.141	-0.237
Lesotho	0.973	0.903	0.864	-0.070	-0.039	-0.109
Liberia	0.981	0.908	0.675	-0.073	-0.233	-0.306
Libya	0.788	0.765	0.880	-0.022	0.114	0.092
Luxembourg	0.950	0.931	0.958	-0.019	0.027	0.008
Madagascar	0.968	0.901	0.832	-0.067	-0.069	-0.136
Malawi	0.955	0.912	0.851	-0.043	-0.061	-0.104
Malaysia	0.890	0.819	0.877	-0.071	0.058	-0.013
Mali	0.950	0.903	0.956	-0.047	0.053	0.006
Malta	0.976	0.962	0.958	-0.014	-0.004	-0.018
Mauritius	0.964	0.847	0.919	-0.117	0.072	-0.045
Mexico	0.965	0.819	0.500	-0.146	-0.319	-0.465
Morocco	0.980	0.742	0.761	-0.238	0.019	-0.219
Mozambique	0.472	0.403	0.124	-0.069	-0.279	-0.348
Myanmar	0.848	0.749	0.662	-0.098	-0.087	-0.186
Nepal	0.923	0.920	0.909	-0.003	-0.011	-0.014
Netherlands	0.946	0.921	0.982	-0.025	0.061	0.036
New Zealand	0.964	0.875	0.897	-0.089	0.022	-0.067
Nicaragua	0.836	0.418	0.280	-0.417	-0.138	-0.556
Niger	0.979	0.903	0.977	-0.076	0.074	-0.002
Nigeria	0.460	0.663	0.819	0.203	0.156	0.359
Norway	0.956	0.916	0.948	-0.040	0.032	-0.008
Pakistan	0.467	0.727	0.817	0.260	0.090	0.350
Panama	0.984	0.925	0.871	-0.059	-0.054	-0.113
Papua New G.	0.960	0.909	0.948	-0.051	0.039	-0.012
Paraguay	0.969	0.873	0.749	-0.096	-0.124	-0.220
Peru	0.896	0.513	0.262	-0.383	-0.251	-0.634
Philippines	0.618	0.417	0.528	-0.200	0.110	-0.090

Appendix E (cont'd)

Country	SEC 1970	SEC 1980	SEC 1990	SEC 1970/80	SEC 1980/90	SEC 1970/90
Poland	0.988	0.953	0.500	-0.035	-0.453	-0.488
Portugal	0.470	0.833	0.826	0.363	-0.007	0.356
Romania	1.000	0.989	0.822	-0.011	-0.167	-0.178
Rwanda	0.869	0.849	0.815	-0.020	-0.034	-0.054
Saudi Arabia	0.949	0.751	0.763	-0.198	0.012	-0.186
Senegal	0.983	0.915	0.940	-0.068	0.025	-0.043
Sierra Leone	0.981	0.875	0.500	-0.106	-0.375	-0.481
Singapore	0.989	0.941	0.981	-0.048	0.040	-0.008
Somalia	0.665	0.503	0.003	-0.162	-0.500	-0.662
South Africa	0.819	0.719	0.582	-0.100	-0.137	-0.236
Spain	0.918	0.839	0.911	-0.079	0.072	-0.007
Sri Lanka	0.802	0.739	0.569	-0.063	-0.170	-0.233
Sudan	0.463	0.355	0.165	-0.108	-0.190	-0.298
Sweden	0.957	0.900	0.926	-0.057	0.026	-0.031
Switzerland	0.956	0.950	0.962	-0.006	0.012	0.006
Syria	0.474	0.382	0.727	-0.092	0.345	0.253
Tanzania	0.982	0.735	0.743	-0.247	0.008	-0.239
Thailand	0.874	0.800	0.860	-0.074	0.060	-0.014
Togo	0.987	0.911	0.956	-0.076	0.045	-0.031
Trinidad & T.	0.968	0.815	0.935	-0.153	0.120	-0.033
Tunisia	0.964	0.913	0.924	-0.051	0.011	-0.040
Turkey	0.804	0.548	0.379	-0.256	-0.170	-0.426
UAE	0.661	0.873	0.989	0.212	0.116	0.328
Uganda	0.468	0.000	0.000	-0.468	0.000	-0.468
UK	0.848	0.737	0.834	-0.112	0.097	-0.015
Uruguay	0.500	0.500	0.500	0.000	0.000	0.000
USA	0.471	0.824	0.715	0.353	-0.109	0.244
USSR	0.891	0.497	0.483	-0.394	-0.014	-0.408
Venezuela	0.987	0.860	0.788	-0.127	-0.072	-0.199
Yugoslavia	0.874	0.816	0.000	-0.058	-0.816	-0.874
Zaire	0.701	0.686	0.500	-0.015	-0.186	-0.201
Zambia	0.924	0.924	0.578	0.000	-0.346	-0.346
Zimbabwe	0.830	0.681	0.770	-0.150	0.089	-0.061

*Notes. See Technical Note 3 (section 2) for the details concerning the construction of the Security Index (SEC) and the sources used. The SEC is based on a scale from 1.000 (highest possible value) to 0.000 (lowest possible value).

APPENDIX F - Scaled Inflation (INFL) Rates*
All Countries (Alphabetical Order)

Country	INFL 1970	INFL 1980	INFL 1990	Country	INFL 1970	INFL 1980	INFL 1990	Country	INFL 1970	INFL 1980	INFL 1990
Afghanistan	0.762	0.956	0.498	Indonesia	0.000	0.570	0.830	Spain	0.836	0.678	0.822
Albania	0.992	0.992	1.000	Iran	1.000	0.552	0.724	Sri Lanka	0.964	0.754	0.776
Algeria	0.946	0.710	0.798	Iraq	0.966	0.642	0.794	Sudan	0.926	0.710	0.330
Angola	0.934	0.580	0.000	Ireland	0.896	0.716	0.884	Sweden	0.914	0.800	0.852
Argentina	0.572	0.000	0.000	Israel	0.876	0.210	0.000	Switzerland	0.912	0.900	0.924
Australia	0.938	0.764	0.860	Italy	0.912	0.688	0.810	Syria	0.948	0.764	0.714
Austria	0.926	0.870	0.928	Ivory Coast	0.944	0.740	0.924	Tanzania	0.964	0.718	0.486
Bangladesh	0.926	0.584	0.814	Jamaica	0.920	0.654	0.608	Thailand	0.964	0.816	0.926
Barbados	0.870	0.730	0.896	Japan	0.898	0.830	0.970	Togo	0.974	0.822	0.912
Belgium	0.928	0.844	0.916	Jordan	0.946	0.864	0.968	Trinid & T.	0.936	0.630	0.870
Benin	0.962	0.794	0.968	Kenya	0.968	0.798	0.816	Tunisia	0.928	0.826	0.848
Bolivia	0.930	0.580	0.000	Korea, S.	0.650	0.598	0.888	Turkey	0.888	0.412	0.106
Botswana	0.912	0.768	0.736	Kuwait	0.988	0.796	1.000	UAE	0.322	0.746	0.978
Brazil	0.078	0.228	0.000	Lesotho	0.946	0.806	0.728	Uganda	0.936	0.000	0.000
Bulgaria	0.992	0.954	0.844	Liberia	0.962	0.816	0.870	UK	0.918	0.710	0.884
Burki Faso	0.974	0.828	0.924	Libya	0.812	0.768	0.996	Uruguay	0.000	0.000	0.000
Burundi	0.944	0.786	0.914	Luxembourg	0.900	0.862	0.916	USA	0.942	0.850	0.916
Cameroon	0.916	0.804	0.910	Madagascar	0.936	0.802	0.664	USSR	1.000	0.994	0.966
Canada	0.938	0.826	0.914	Malawi	0.910	0.824	0.702	Venezuela	0.974	0.720	0.576
Cen. Afr. R.	0.918	0.758	0.898	Malaysia	1.000	0.854	0.966	Yugoslavia	0.748	0.632	0.000
Chad	0.908	0.846	0.978	Mali	0.900	0.806	0.912	Zaire	0.402	0.372	0.000
Chile	0.340	0.000	0.590	Malta	0.952	0.924	0.916	Zambia	0.848	0.848	0.156
China	1.000	0.982	0.884	Mauritius	0.928	0.694	0.838	Zimbabwe	0.974	0.812	0.750
Colombia	0.762	0.554	0.500	Mexico	0.930	0.638	0.000				
Congo	0.882	0.832	0.992	Morocco	0.960	0.834	0.858				
Costa Rica	0.962	0.694	0.542	Mozambique	0.944	0.806	0.248				
Cuba	0.990	0.990	0.990	Myanmar	0.946	0.786	0.622				
Cyprus	0.934	0.832	0.890	Nepal	0.846	0.840	0.818				
Czech.	0.994	0.976	0.930	Netherlands	0.892	0.842	0.964				
Denmark	0.872	0.798	0.896	New Zealand	0.928	0.750	0.794				
Domin Rep.	0.958	0.818	0.510	Nicaragua	0.964	0.744	0.000				
Ecuador	0.878	0.724	0.240	Niger	0.958	0.806	0.954				
Egypt	0.948	0.808	0.750	Nigeria	0.920	0.696	0.638				
El Salvador	0.990	0.786	0.652	Norway	0.912	0.832	0.896				
Finland	0.880	0.754	0.868	Pakistan	0.934	0.732	0.860				
France	0.916	0.796	0.886	Panama	0.968	0.850	0.952				
Gabon	0.932	0.650	0.970	Papua NG.	0.920	0.818	0.896				
Gambia	0.936	0.788	0.636	Paraguay	0.938	0.746	0.498				
GDR	0.998	1.000	1.000	Peru	0.792	0.398	0.000				
Germ., W.	0.936	0.898	0.944	Philippines	0.884	0.734	0.708				
Ghana	0.848	0.296	0.200	Poland	0.976	0.906	0.000				
Greece	0.936	0.710	0.646	Portugal	0.940	0.666	0.652				
Guatemala	0.994	0.790	0.682	Romania	1.000	0.978	0.876				
Guinea	0.970	0.912	0.556	Rwanda	0.738	0.698	0.918				
Haiti	0.920	0.814	0.858	Saudi Arabia	0.898	0.502	1.000				
Honduras	0.942	0.838	0.864	Senegal	0.966	0.830	0.880				
Hong Kong	0.952	0.816	0.850	Sierra Leone	0.962	0.750	0.000				
Hungary	0.948	0.944	0.794	Singapore	0.978	0.882	0.962				
Iceland	0.948	0.298	0.400	Somalia	0.910	0.696	0.006				
India	0.858	0.832	0.836	South Africa	0.940	0.740	0.712				

*Notes. See Technical Note 3 (section 2) for the details concerning the construction of the INFL variable and the sources used. The INFL variable is based on a scale from 1.000 (best possible value) to 0.000 (worst possible value).

APPENDIX G - Scaled Peace/Conflict (CONF) Rates*
All Countries (Alphabetical Order)

Country	CONF 1970	CONF 1980	CONF 1990	Country	CONF 1970	CONF 1980	CONF 1990	Country	CONF 1970	CONF 1980	CONF 1990
Afghanistan	1.000	0.000	0.000	Indonesia	0.000	0.000	0.784	Spain	1.000	1.000	1.000
Albania	1.000	1.000	1.000	Iran	1.000	0.000	0.000	Sri Lanka	0.640	0.724	0.361
Algeria	1.000	1.000	0.752	Iraq	0.000	0.000	0.000	Sudan	0.000	0.000	0.000
Angola	0.000	0.000	0.000	Ireland	1.000	1.000	1.000	Sweden	1.000	1.000	1.000
Argentina	0.794	0.529	1.000	Israel	0.000	0.660	0.640	Switzerland	1.000	1.000	1.000
Australia	1.000	1.000	1.000	Italy	1.000	1.000	1.000	Syria	0.000	0.000	0.740
Austria	1.000	1.000	1.000	Ivory Coast	1.000	1.000	1.000	Tanzania	1.000	0.752	1.000
Bangladesh	0.000	0.182	0.305	Jamaica	1.000	0.784	1.000	Thailand	0.784	0.784	0.794
Barbados	1.000	1.000	1.000	Japan	1.000	1.000	1.000	Togo	1.000	1.000	1.000
Belgium	1.000	1.000	1.000	Jordan	0.000	1.000	1.000	Trinid & T.	1.000	1.000	1.000
Benin	1.000	1.000	1.000	Kenya	1.000	1.000	1.000	Tunisia	1.000	1.000	1.000
Bolivia	1.000	1.000	1.000	Korea, S.	1.000	1.000	1.000	Turkey	0.720	0.685	0.651
Botswana	1.000	1.000	1.000	Kuwait	1.000	1.000	0.514	UAE	1.000	1.000	1.000
Brazil	1.000	0.784	1.000	Lesotho	1.000	1.000	1.000	Uganda	0.000	0.000	0.000
Bulgaria	1.000	1.000	1.000	Liberia	1.000	1.000	0.480	UK	0.779	0.763	0.783
Burkina Faso	1.000	1.000	1.000	Libya	0.763	0.763	0.763	Uruguay	1.000	1.000	1.000
Burundi	0.000	1.000	1.000	Luxembourg	1.000	1.000	1.000	USA	0.000	0.798	0.514
Cameroon	1.000	1.000	1.000	Madagascar	1.000	1.000	1.000	USSR	0.782	0.000	0.000
Canada	1.000	1.000	1.000	Malawi	1.000	1.000	1.000	Venezuela	1.000	1.000	1.000
Cen. Afr. Rep.	1.000	1.000	1.000	Malaysia	0.780	0.784	0.787	Yugoslavia	1.000	1.000	0.000
Chad	0.613	0.613	0.632	Mali	1.000	1.000	1.000	Zaire	1.000	1.000	1.000
Chile	0.400	1.000	1.000	Malta	1.000	1.000	1.000	Zambia	1.000	1.000	1.000
China	0.000	0.000	0.795	Mauritius	1.000	1.000	1.000	Zimbabwe	0.686	0.549	0.789
Colombia	1.000	0.608	0.692	Mexico	1.000	1.000	1.000				
Congo	1.000	1.000	1.000	Morocco	1.000	0.649	0.664				
Costa Rica	1.000	1.000	1.000	Mozambique	0.000	0.000	0.000				
Cuba	1.000	1.000	1.000	Myanmar	0.750	0.713	0.702				
Cyprus	0.720	1.000	1.000	Nepal	1.000	1.000	1.000				
Czech.	0.798	1.000	1.000	Netherlands	1.000	1.000	1.000				
Denmark	1.000	1.000	1.000	New Zealand	1.000	1.000	1.000				
Domin. Rep.	0.752	1.000	1.000	Nicaragua	0.707	0.093	0.560				
Ecuador	1.000	1.000	1.000	Niger	1.000	1.000	1.000				
Egypt	0.000	1.000	1.000	Nigeria	0.000	0.630	1.000				
El Salvador	0.728	0.194	0.000	Norway	1.000	1.000	1.000				
Finland	1.000	1.000	1.000	Pakistan	0.000	0.723	0.774				
France	1.000	1.000	1.000	Panama	1.000	1.000	0.789				
Gabon	1.000	1.000	1.000	Papua NG.	1.000	1.000	1.000				
Gambia	1.000	1.000	1.000	Paraguay	1.000	1.000	1.000				
GDR	1.000	1.000	1.000	Peru	1.000	0.628	0.524				
Germany, W.	1.000	1.000	1.000	Philippines	0.351	0.101	0.347				
Ghana	1.000	0.784	1.000	Poland	1.000	1.000	1.000				
Greece	0.720	1.000	1.000	Portugal	0.000	1.000	1.000				
Guatemala	0.320	0.570	0.454	Romania	1.000	1.000	0.768				
Guinea	1.000	1.000	1.000	Rwanda	1.000	1.000	0.712				
Haiti	1.000	1.000	1.000	Saudi Arabia	1.000	1.000	0.525				
Honduras	0.728	1.000	1.000	Senegal	1.000	1.000	1.000				
Hong Kong	1.000	1.000	1.000	Sierra Leone	1.000	1.000	1.000				
Hungary	1.000	1.000	1.000	Singapore	1.000	1.000	1.000				
Iceland	1.000	1.000	1.000	Somalia	0.420	0.310	0.000				
India	0.000	0.384	0.264	South Africa	0.697	0.698	0.453				

*Notes. See Technical Note 3 (section 2) for the details concerning the construction of the CONF variable and the sources used. The CONF variable is based on a scale from 1.000 (complete peace/stability) to 0.000 (complete conflict/instability).

APPENDIX H - Liberty Index (LIB) Values*
All Countries (Alphabetical Order)

Country	LIB 1970	LIB 1980	LIB 1990	LIB 1970/80	LIB 1980/90	LIB 1970/90
Afghanistan	0.318	0.180	0.229	-0.138	0.049	-0.089
Albania	0.396	0.442	0.495	0.046	0.053	0.099
Algeria	0.374	0.436	0.590	0.062	0.153	0.215
Angola	0.281	0.239	0.208	-0.042	-0.031	-0.073
Argentina	0.771	0.620	0.881	-0.152	0.261	0.109
Australia	0.981	0.987	0.991	0.006	0.004	0.010
Austria	0.970	0.983	0.990	0.013	0.007	0.020
Bangladesh	0.527	0.596	0.508	0.069	-0.089	-0.019
Barbados	0.946	0.972	0.985	0.026	0.013	0.039
Belgium	0.975	0.986	0.988	0.011	0.002	0.013
Benin	0.415	0.407	0.433	-0.007	0.026	0.019
Bolivia	0.507	0.518	0.668	0.011	0.150	0.161
Botswana	0.606	0.723	0.805	0.117	0.081	0.199
Brazil	0.535	0.730	0.773	0.196	0.043	0.239
Bulgaria	0.453	0.476	0.566	0.023	0.090	0.113
Burkina Faso	0.444	0.459	0.410	0.015	-0.049	-0.034
Burundi	0.257	0.333	0.387	0.076	0.054	0.130
Cameroon	0.540	0.408	0.433	-0.132	0.025	-0.107
Canada	0.977	0.987	0.991	0.010	0.004	0.014
Cen. Afr. Rep.	0.260	0.364	0.389	0.104	0.025	0.129
Chad	0.204	0.329	0.364	0.125	0.035	0.160
Chile	0.812	0.623	0.806	-0.189	0.184	-0.005
China	0.401	0.552	0.482	0.151	-0.070	0.081
Colombia	0.800	0.768	0.725	-0.031	-0.043	-0.075
Congo	0.341	0.393	0.471	0.052	0.078	0.130
Costa Rica	0.941	0.975	0.982	0.034	0.007	0.041
Cuba	0.446	0.558	0.511	0.112	-0.047	0.065
Cyprus	0.800	0.813	0.961	0.013	0.148	0.161
Czech.	0.473	0.563	0.679	0.090	0.115	0.206
Denmark	0.982	0.990	0.990	0.008	0.000	0.008
Dominican Rep.	0.790	0.730	0.753	-0.059	0.023	-0.036
Ecuador	0.691	0.810	0.832	0.118	0.022	0.140
Egypt	0.345	0.470	0.656	0.124	0.186	0.311
El Salvador	0.668	0.628	0.685	-0.040	0.057	0.017
Finland	0.898	0.908	0.968	0.010	0.060	0.070
France	0.894	0.905	0.908	0.011	0.003	0.014
Gabon	0.351	0.389	0.500	0.038	0.110	0.148
Gambia	0.595	0.581	0.651	-0.013	0.069	0.056
GDR	0.470	0.510	0.574	0.040	0.064	0.104
Germany, W.	0.972	0.901	0.932	-0.071	0.031	-0.040
Ghana	0.399	0.642	0.499	0.243	-0.144	0.099
Greece	0.539	0.894	0.905	0.354	0.011	0.365
Guatemala	0.658	0.478	0.711	-0.180	0.233	0.053
Guinea	0.191	0.225	0.367	0.034	0.142	0.176

Appendix H (cont'd)

Country	LIB 1970	LIB 1980	LIB 1990	LIB 1970/80	LIB 1980/90	LIB 1970/90
Haiti	0.372	0.445	0.559	0.073	0.113	0.186
Honduras	0.648	0.692	0.730	0.044	0.038	0.082
Hong Kong	0.893	0.902	0.909	0.009	0.007	0.016
Hungary	0.541	0.641	0.816	0.099	0.176	0.275
Iceland	0.985	0.992	0.992	0.007	0.000	0.007
India	0.620	0.677	0.688	0.057	0.011	0.068
Indonesia	0.484	0.529	0.567	0.045	0.038	0.083
Iran	0.387	0.494	0.578	0.107	0.083	0.190
Iraq	0.356	0.390	0.436	0.034	0.046	0.080
Ireland	0.892	0.986	0.989	0.094	0.003	0.097
Israel	0.804	0.898	0.905	0.093	0.007	0.100
Italy	0.883	0.899	0.989	0.016	0.090	0.106
Ivory Coast	0.379	0.500	0.528	0.120	0.028	0.148
Jamaica	0.861	0.805	0.896	-0.055	0.090	0.035
Japan	0.975	0.989	0.994	0.014	0.005	0.019
Jordan	0.460	0.502	0.612	0.042	0.109	0.151
Kenya	0.584	0.617	0.472	0.033	-0.145	-0.112
Korea, S.	0.512	0.564	0.802	0.052	0.238	0.290
Kuwait	0.691	0.716	0.622	0.025	-0.094	-0.069
Lesotho	0.565	0.506	0.510	-0.059	0.004	-0.055
Liberia	0.280	0.363	0.399	0.083	0.036	0.119
Libya	0.400	0.408	0.409	0.008	0.001	0.009
Luxembourg	0.974	0.989	0.987	0.015	-0.002	0.013
Madagascar	0.549	0.367	0.546	-0.182	0.179	-0.003
Malawi	0.240	0.201	0.300	-0.039	0.099	0.060
Malaysia	0.770	0.708	0.695	-0.062	-0.013	-0.075
Mali	0.225	0.258	0.321	0.033	0.063	0.096
Malta	0.889	0.844	0.965	-0.044	0.121	0.076
Mauritius	0.840	0.733	0.888	-0.107	0.155	0.048
Mexico	0.723	0.707	0.724	-0.016	0.017	0.001
Morocco	0.559	0.572	0.609	0.013	0.037	0.050
Mozambique	0.287	0.232	0.228	-0.055	-0.004	-0.059
Myanmar	0.522	0.465	0.434	-0.056	-0.031	-0.088
Nepal	0.420	0.528	0.532	0.108	0.004	0.112
Netherlands	0.984	0.986	0.992	0.002	0.006	0.008
New Zealand	0.979	0.984	0.988	0.005	0.004	0.009
Nicaragua	0.665	0.534	0.658	-0.132	0.124	-0.007
Niger	0.292	0.324	0.383	0.032	0.059	0.091
Nigeria	0.515	0.635	0.522	0.120	-0.114	0.007
Norway	0.984	0.990	0.990	0.006	0.000	0.006
Pakistan	0.448	0.449	0.646	0.001	0.198	0.199
Panama	0.511	0.682	0.692	0.171	0.010	0.181
Papua New G.	0.751	0.805	0.809	0.054	0.004	0.058
Paraguay	0.493	0.597	0.689	0.103	0.092	0.196
Peru	0.501	0.664	0.656	0.164	-0.008	0.155
Philippines	0.473	0.580	0.761	0.106	0.182	0.288

Appendix H (cont'd)

Country	LIB 1970	LIB 1980	LIB 1990	LIB 1970/80	LIB 1980/90	LIB 1970/90
Poland	0.535	0.700	0.790	0.165	0.090	0.255
Portugal	0.511	0.886	0.901	0.374	0.015	0.389
Romania	0.524	0.547	0.524	0.023	-0.023	0.000
Rwanda	0.345	0.352	0.382	0.007	0.030	0.037
Saudi Arabia	0.398	0.452	0.463	0.054	0.011	0.065
Senegal	0.346	0.543	0.619	0.197	0.076	0.273
Sierra Leone	0.322	0.367	0.406	0.045	0.039	0.084
Singapore	0.637	0.651	0.713	0.014	0.062	0.076
Somalia	0.315	0.253	0.282	-0.062	0.029	-0.033
South Africa	0.558	0.492	0.597	-0.065	0.104	0.039
Spain	0.546	0.841	0.965	0.295	0.124	0.419
Sri Lanka	0.753	0.780	0.656	0.027	-0.125	-0.098
Sudan	0.329	0.432	0.383	0.102	-0.048	0.054
Sweden	0.985	0.991	0.993	0.006	0.002	0.008
Switzerland	0.981	0.988	0.991	0.007	0.003	0.010
Syria	0.367	0.495	0.438	0.128	-0.057	0.071
Tanzania	0.360	0.381	0.435	0.021	0.054	0.075
Thailand	0.570	0.715	0.798	0.145	0.083	0.229
Togo	0.444	0.399	0.433	-0.044	0.034	-0.010
Trinidad & T.	0.791	0.891	0.982	0.099	0.091	0.191
Tunisia	0.483	0.564	0.709	0.081	0.145	0.226
Turkey	0.567	0.586	0.685	0.019	0.099	0.118
UAE	0.579	0.624	0.636	0.045	0.012	0.057
Uganda	0.306	0.456	0.558	0.150	0.102	0.252
UK	0.979	0.985	0.990	0.006	0.005	0.011
Uruguay	0.697	0.599	0.890	-0.098	0.291	0.193
USA	0.978	0.985	0.988	0.007	0.003	0.010
USSR	0.538	0.488	0.657	-0.050	0.169	0.118
Venezuela	0.849	0.867	0.814	0.018	-0.052	-0.034
Yugoslavia	0.508	0.630	0.698	0.121	0.068	0.190
Zaire	0.372	0.420	0.426	0.048	0.006	0.054
Zambia	0.495	0.462	0.542	-0.032	0.079	0.047
Zimbabwe	0.513	0.576	0.602	0.063	0.026	0.089

*Notes. See Technical Note 3 (section 3) for the details concerning the construction of the Liberty Index (LIB) and the sources used. The LIB index is based on a scale from 1.000 (highest possible value) to 0.000 (lowest possible value).

APPENDIX I - Scaled Civil Liberties (CIVIL) Values*
All Countries (Alphabetical Order)

Country	CIVIL 1970	CIVIL 1980	CIVIL 1990	Country	CIVIL 1970	CIVIL 1980	CIVIL 1990	Country	CIVIL 1970	CIVIL 1980	CIVIL 1990
Afghanistan	0.333	0.000	0.050	Indonesia	0.333	0.333	0.333	Spain	0.167	0.717	0.950
Albania	0.000	0.000	0.050	Iran	0.167	0.217	0.283	Sri Lanka	0.667	0.667	0.383
Algeria	0.167	0.167	0.383	Iraq	0.000	0.000	0.050	Sudan	0.167	0.283	0.117
Angola	0.167	0.000	0.000	Ireland	0.833	1.000	1.000	Sweden	1.000	1.000	1.000
Argentina	0.667	0.333	0.833	Israel	0.667	0.833	0.833	Switzerland	1.000	1.000	1.000
Australia	1.000	1.000	1.000	Italy	0.833	0.833	1.000	Syria	0.000	0.167	0.000
Austria	1.000	1.000	1.000	Ivory Coast	0.167	0.333	0.333	Tanzania	0.167	0.167	0.217
Bangladesh	0.500	0.617	0.383	Jamaica	0.833	0.667	0.833	Thailand	0.333	0.550	0.667
Barbados	1.000	1.000	1.000	Japan	1.000	1.000	1.000	Togo	0.333	0.167	0.167
Belgium	1.000	1.000	1.000	Jordan	0.167	0.167	0.333	Trinid & T.	0.667	0.833	1.000
Benin	0.333	0.167	0.167	Kenya	0.500	0.500	0.167	Tunisia	0.333	0.333	0.550
Bolivia	0.500	0.450	0.667	Korea, S.	0.167	0.217	0.667	Turkey	0.500	0.450	0.550
Botswana	0.500	0.667	0.783	Kuwait	0.500	0.500	0.283	UAE	0.333	0.333	0.333
Brazil	0.333	0.667	0.717	Lesotho	0.500	0.333	0.283	Uganda	0.000	0.283	0.450
Bulgaria	0.000	0.000	0.167	Liberia	0.167	0.217	0.217	UK	1.000	1.000	1.000
Burkina Faso	0.500	0.450	0.283	Libya	0.167	0.117	0.050	Uruguay	0.500	0.283	0.833
Burundi	0.000	0.117	0.167	Luxembourg	1.000	1.000	1.000	USA	1.000	1.000	1.000
Cameroon	0.500	0.167	0.167	Madagascar	0.667	0.167	0.450	USSR	0.167	0.050	0.383
Canada	1.000	1.000	1.000	Malawi	0.167	0.000	0.117	Venezuela	0.833	0.833	0.717
Cen. Afr. Rep.	0.000	0.217	0.217	Malaysia	0.667	0.500	0.450	Yugoslavia	0.167	0.333	0.450
Chad	0.000	0.167	0.167	Mali	0.167	0.167	0.217	Zaire	0.167	0.167	0.117
Chile	0.833	0.333	0.667	Malta	0.833	0.717	0.950	Zambia	0.333	0.217	0.333
China	0.000	0.217	0.050	Mauritius	0.833	0.550	0.833	Zimbabwe	0.333	0.383	0.383
Colombia	0.833	0.667	0.550	Mexico	0.667	0.550	0.550				
Congo	0.000	0.050	0.167	Morocco	0.500	0.450	0.450				
Costa Rica	1.000	1.000	1.000	Mozambique	0.167	0.000	0.050				
Cuba	0.000	0.167	0.050	Myanmar	0.333	0.167	0.050				
Cyprus	0.667	0.667	0.950	Nepal	0.333	0.500	0.450				
Czech.	0.000	0.167	0.383	Netherlands	1.000	1.000	1.000				
Denmark	1.000	1.000	1.000	New Zealand	1.000	1.000	1.000				
Domin. Rep.	0.833	0.667	0.667	Nicaragua	0.667	0.333	0.500				
Ecuador	0.667	0.833	0.833	Niger	0.167	0.167	0.217				
Egypt	0.167	0.283	0.500	Nigeria	0.500	0.667	0.383				
El Salvador	0.667	0.500	0.550	Norway	1.000	1.000	1.000				
Finland	0.833	0.833	0.950	Pakistan	0.333	0.283	0.617				
France	0.833	0.833	0.833	Panama	0.167	0.450	0.450				
Gabon	0.167	0.167	0.333	Papua NG.	0.833	0.833	0.783				
Gambia	0.833	0.717	0.783	Paraguay	0.167	0.333	0.500				
GDR	0.000	0.050	0.167	Peru	0.333	0.617	0.550				
Germany, W.	1.000	0.833	0.883	Philippines	0.167	0.333	0.667				
Ghana	0.167	0.617	0.283	Poland	0.167	0.450	0.617				
Greece	0.167	0.833	0.833	Portugal	0.167	0.833	0.833				
Guatemala	0.667	0.217	0.617	Romania	0.167	0.167	0.117				
Guinea	0.000	0.000	0.217	Rwanda	0.167	0.167	0.167				
Haiti	0.167	0.217	0.383	Saudi Arabia	0.167	0.167	0.117				
Honduras	0.667	0.667	0.667	Senegal	0.167	0.550	0.617				
Hong Kong	0.833	0.833	0.833	Sierra Leone	0.333	0.333	0.333				
Hungary	0.167	0.333	0.667	Singapore	0.333	0.333	0.450				
Iceland	1.000	1.000	1.000	Somalia	0.167	0.000	0.000				
India	0.667	0.717	0.667	South Africa	0.333	0.167	0.333				

*Notes. See Technical Note 3 (section 3) for the details concerning the construction of the CIVIL variable and the sources used. The CIVIL variable is based on a scale from 1.000 (highest possible value) to 0.000 (lowest possible value).

APPENDIX J - Scaled Child Survival (SURV) Values*
All Countries (Alphabetical Order)

Country	SURV 1970	SURV 1980	SURV 1990	Country	SURV 1970	SURV 1980	SURV 1990	Country	SURV 1970	SURV 1980	SURV 1990
Afghanistan	0.302	0.360	0.408	Indonesia	0.634	0.724	0.800	Spain	0.926	0.966	0.980
Albania	0.792	0.884	0.940	Iran	0.608	0.772	0.872	Sri Lanka	0.840	0.894	0.928
Algeria	0.582	0.706	0.796	Iraq	0.712	0.780	0.822	Sudan	0.492	0.580	0.650
Angola	0.396	0.478	0.416	Ireland	0.950	0.972	0.978	Sweden	0.970	0.982	0.986
Argentina	0.876	0.906	0.928	Israel	0.942	0.962	0.976	Switzerland	0.962	0.976	0.982
Australia	0.962	0.974	0.982	Italy	0.932	0.964	0.978	Syria	0.734	0.824	0.876
Austria	0.940	0.966	0.980	Ivory Coast	0.592	0.666	0.722	Tanzania	0.554	0.596	0.654
Bangladesh	0.554	0.576	0.632	Jamaica	0.888	0.944	0.958	Thailand	0.806	0.880	0.930
Barbados	0.892	0.944	0.970	Japan	0.950	0.978	0.988	Togo	0.554	0.632	0.700
Belgium	0.950	0.972	0.976	Jordan	0.754	0.838	0.890	Trinid & T.	0.916	0.948	0.964
Benin	0.496	0.648	0.700	Kenya	0.668	0.734	0.778	Tunisia	0.632	0.794	0.868
Bolivia	0.514	0.586	0.670	Korea, S.	0.858	0.912	0.938	Turkey	0.634	0.722	0.820
Botswana	0.712	0.780	0.826	Kuwait	0.882	0.932	0.960	UAE	0.824	0.914	0.938
Brazil	0.736	0.794	0.830	Lesotho	0.630	0.678	0.736	Uganda	0.612	0.628	0.666
Bulgaria	0.906	0.952	0.966	Liberia	0.394	0.510	0.582	UK	0.958	0.970	0.980
Burkina Faso	0.388	0.468	0.536	Libya	0.634	0.700	0.768	Uruguay	0.894	0.914	0.946
Burundi	0.514	0.550	0.608	Luxembourg	0.948	0.978	0.974	USA	0.956	0.970	0.976
Cameroon	0.580	0.650	0.700	Madagascar	0.432	0.568	0.642	USSR	0.910	0.926	0.930
Canada	0.954	0.974	0.982	Malawi	0.314	0.402	0.484	Venezuela	0.864	0.900	0.912
Cen. Afr. Rep.	0.520	0.512	0.562	Malaysia	0.874	0.916	0.940	Yugoslavia	0.850	0.926	0.946
Chad	0.408	0.492	0.562	Mali	0.284	0.350	0.426	Zaire	0.578	0.674	0.736
Chile	0.790	0.912	0.946	Malta	0.944	0.972	0.980	Zambia	0.656	0.708	0.750
China	0.802	0.888	0.914	Mauritius	0.846	0.916	0.942	Zimbabwe	0.692	0.768	0.820
Colombia	0.766	0.870	0.900	Mexico	0.780	0.864	0.898				
Congo	0.682	0.736	0.776	Morocco	0.618	0.694	0.768				
Costa Rica	0.882	0.950	0.964	Mozambique	0.408	0.464	0.406				
Cuba	0.892	0.950	0.972	Myanmar	0.710	0.764	0.818				
Cyprus	0.934	0.960	0.972	Nepal	0.506	0.556	0.614				
Czech.	0.946	0.960	0.974	Netherlands	0.968	0.972	0.984				
Denmark	0.964	0.980	0.980	New Zealand	0.958	0.968	0.976				
Domini. Rep.	0.746	0.794	0.840	Nicaragua	0.664	0.734	0.816				
Ecuador	0.716	0.786	0.830	Niger	0.418	0.482	0.550				
Egypt	0.524	0.656	0.812	Nigeria	0.530	0.604	0.660				
El Salvador	0.670	0.756	0.820	Norway	0.968	0.980	0.980				
Finland	0.962	0.982	0.986	Pakistan	0.562	0.614	0.676				
France	0.954	0.976	0.982	Panama	0.856	0.914	0.934				
Gabon	0.536	0.612	0.666	Papua NG.	0.668	0.776	0.834				
Gambia	0.356	0.446	0.518	Paraguay	0.820	0.860	0.878				
GDR	0.940	0.970	0.982	Peru	0.668	0.712	0.762				
Germany, W.	0.944	0.968	0.980	Philippines	0.780	0.826	0.856				
Ghana	0.632	0.668	0.714	Poland	0.904	0.950	0.964				
Greece	0.912	0.954	0.976	Portugal	0.856	0.938	0.968				
Guatemala	0.650	0.740	0.806	Romania	0.882	0.928	0.932				
Guinea	0.382	0.450	0.518	Rwanda	0.524	0.538	0.598				
Haiti	0.578	0.674	0.734	Saudi Arabia	0.630	0.738	0.810				
Honduras	0.630	0.718	0.794	Senegal	0.526	0.536	0.622				
Hong Kong	0.952	0.970	0.984	Sierra Leone	0.310	0.400	0.478				
Hungary	0.916	0.948	0.966	Singapore	0.940	0.968	0.976				
Iceland	0.970	0.984	0.984	Somalia	0.464	0.506	0.564				
India	0.574	0.638	0.710	South Africa	0.782	0.818	0.860				

*Notes. See Technical Note 3 (section 3) for the details concerning the construction of the SURV variable and the sources used. The SURV variable is based on a scale from 1.000 (highest possible value) to 0.000 (lowest possible value).

APPENDIX K -Mobility Index (MOB) Values*
All Countries (Alphabetical Order)

Country	MOB 1970	MOB 1980	MOB 1990	MOB 1970/80	MOB 1980/90	MOB 1970/90
Afghanistan	0.081	0.101	0.167	0.020	0.066	0.087
Albania	0.287	0.374	0.420	0.087	0.046	0.133
Algeria	0.202	0.351	0.464	0.150	0.112	0.262
Angola	0.213	0.232	0.183	0.020	-0.049	-0.029
Argentina	0.498	0.574	0.691	0.076	0.117	0.193
Australia	0.627	0.662	0.736	0.035	0.074	0.109
Austria	0.577	0.646	0.734	0.069	0.087	0.156
Bangladesh	0.093	0.133	0.192	0.040	0.059	0.099
Barbados	0.524	0.667	0.686	0.143	0.019	0.162
Belgium	0.637	0.715	0.786	0.078	0.071	0.149
Benin	0.261	0.295	0.211	0.034	-0.084	-0.050
Bolivia	0.278	0.352	0.388	0.074	0.036	0.110
Botswana	0.137	0.200	0.427	0.062	0.228	0.290
Brazil	0.305	0.416	0.456	0.111	0.040	0.151
Bulgaria	0.504	0.559	0.671	0.055	0.112	0.166
Burkina Faso	0.133	0.153	0.142	0.020	-0.012	0.009
Burundi	0.137	0.149	0.125	0.012	-0.025	-0.013
Cameroon	0.129	0.160	0.193	0.031	0.034	0.064
Canada	0.674	0.791	0.939	0.117	0.148	0.265
Cen. Afr. Rep.	0.124	0.148	0.165	0.023	0.018	0.041
Chad	0.075	0.093	0.105	0.018	0.012	0.030
Chile	0.438	0.505	0.594	0.067	0.089	0.156
China	0.240	0.257	0.271	0.017	0.015	0.032
Colombia	0.324	0.434	0.536	0.110	0.102	0.212
Congo	0.302	0.439	0.326	0.137	-0.113	0.024
Costa Rica	0.343	0.487	0.507	0.145	0.020	0.165
Cuba	0.339	0.580	0.630	0.241	0.050	0.291
Cyprus	0.393	0.532	0.628	0.140	0.095	0.235
Czech.	0.494	0.663	0.661	0.169	-0.002	0.167
Denmark	0.623	0.749	0.778	0.127	0.029	0.155
Dominican Rep.	0.220	0.311	0.425	0.091	0.113	0.205
Ecuador	0.283	0.465	0.476	0.182	0.011	0.193
Egypt	0.255	0.356	0.459	0.100	0.103	0.204
El Salvador	0.249	0.281	0.470	0.032	0.190	0.222
Finland	0.636	0.757	0.836	0.121	0.080	0.201
France	0.620	0.703	0.795	0.083	0.092	0.175
Gabon	0.150	0.219	0.218	0.069	-0.000	0.069
Gambia	0.148	0.166	0.160	0.018	-0.006	0.012
GDR	0.725	0.701	0.712	-0.024	0.011	-0.012
Germany, W.	0.630	0.718	0.788	0.088	0.071	0.158
Ghana	0.239	0.311	0.288	0.072	-0.023	0.049
Greece	0.416	0.513	0.645	0.097	0.132	0.229
Guatemala	0.187	0.251	0.282	0.064	0.031	0.095
Guinea	0.141	0.175	0.162	0.034	-0.013	0.021
Haiti	0.190	0.199	0.236	0.009	0.037	0.046

Appendix K (cont'd)

Country	MOB 1970	MOB 1980	MOB 1990	MOB 1970/80	MOB 1980/90	MOB 1970/90
Honduras	0.178	0.256	0.359	0.078	0.103	0.181
Hong Kong	0.489	0.589	0.650	0.100	0.061	0.161
Hungary	0.498	0.562	0.614	0.065	0.052	0.116
Iceland	0.559	0.637	0.703	0.078	0.066	0.145
India	0.202	0.224	0.279	0.022	0.055	0.077
Indonesia	0.208	0.297	0.340	0.089	0.042	0.132
Iran	0.261	0.334	0.419	0.073	0.085	0.158
Iraq	0.273	0.357	0.469	0.084	0.112	0.196
Ireland	0.533	0.627	0.705	0.094	0.078	0.172
Israel	0.585	0.687	0.726	0.102	0.039	0.141
Italy	0.525	0.638	0.676	0.113	0.038	0.151
Ivory Coast	0.134	0.172	0.222	0.038	0.050	0.088
Jamaica	0.441	0.524	0.511	0.083	-0.013	0.070
Japan	0.614	0.717	0.733	0.104	0.016	0.119
Jordan	0.296	0.570	0.561	0.274	-0.009	0.265
Kenya	0.152	0.191	0.187	0.039	-0.004	0.035
Korea, S.	0.336	0.513	0.704	0.176	0.192	0.368
Kuwait	0.490	0.604	0.626	0.113	0.023	0.136
Lesotho	0.139	0.184	0.424	0.044	0.240	0.284
Liberia	0.155	0.199	0.221	0.044	0.022	0.066
Libya	0.283	0.447	0.477	0.163	0.031	0.194
Luxembourg	0.472	0.534	0.553	0.062	0.019	0.081
Madagascar	0.135	0.153	0.190	0.018	0.037	0.055
Malawi	0.122	0.134	0.128	0.012	-0.006	0.006
Malaysia	0.277	0.356	0.467	0.079	0.111	0.189
Mali	0.066	0.136	0.092	0.070	-0.044	0.026
Malta	0.488	0.518	0.599	0.030	0.081	0.111
Mauritius	0.329	0.392	0.463	0.062	0.071	0.133
Mexico	0.286	0.425	0.492	0.140	0.066	0.206
Morocco	0.194	0.266	0.332	0.072	0.067	0.139
Mozambique	0.192	0.212	0.148	0.020	-0.064	-0.044
Myanmar	0.220	0.244	0.242	0.023	-0.002	0.022
Nepal	0.101	0.120	0.142	0.019	0.022	0.041
Netherlands	0.603	0.710	0.762	0.106	0.052	0.159
New Zealand	0.603	0.681	0.770	0.079	0.089	0.168
Nicaragua	0.265	0.395	0.371	0.130	-0.023	0.107
Niger	0.115	0.126	0.146	0.010	0.020	0.031
Nigeria	0.203	0.260	0.290	0.057	0.030	0.087
Norway	0.616	0.720	0.799	0.104	0.078	0.183
Pakistan	0.175	0.188	0.242	0.013	0.054	0.067
Panama	0.366	0.531	0.532	0.165	0.001	0.166
Papua New G.	0.113	0.149	0.175	0.036	0.026	0.062
Paraguay	0.254	0.306	0.318	0.052	0.012	0.064
Peru	0.323	0.447	0.547	0.123	0.101	0.224
Philippines	0.403	0.509	0.523	0.106	0.015	0.120
Poland	0.499	0.579	0.620	0.080	0.041	0.121

Appendix K (cont'd)

Country	MOB 1970	MOB 1980	MOB 1990	MOB 1970/80	MOB 1980/90	MOB 1970/90
Portugal	0.427	0.446	0.582	0.019	0.136	0.155
Romania	0.384	0.532	0.570	0.148	0.039	0.187
Rwanda	0.117	0.129	0.135	0.012	0.006	0.018
Saudi Arabia	0.142	0.227	0.339	0.085	0.113	0.197
Senegal	0.158	0.180	0.173	0.021	-0.007	0.015
Sierra Leone	0.174	0.203	0.194	0.028	-0.008	0.020
Singapore	0.506	0.563	0.593	0.057	0.030	0.087
Somalia	0.131	0.146	0.171	0.015	0.025	0.040
South Africa	0.350	0.361	0.581	0.012	0.219	0.231
Spain	0.435	0.641	0.733	0.206	0.092	0.298
Sri Lanka	0.313	0.347	0.422	0.035	0.074	0.109
Sudan	0.111	0.165	0.194	0.054	0.029	0.083
Sweden	0.667	0.751	0.762	0.083	0.012	0.095
Switzerland	0.523	0.661	0.704	0.139	0.042	0.181
Syria	0.275	0.410	0.469	0.135	0.059	0.194
Tanzania	0.143	0.154	0.146	0.010	-0.007	0.003
Thailand	0.195	0.287	0.334	0.093	0.047	0.140
Togo	0.170	0.228	0.217	0.057	-0.011	0.046
Trinidad & T.	0.425	0.526	0.574	0.102	0.048	0.150
Tunisia	0.235	0.323	0.423	0.088	0.099	0.187
Turkey	0.218	0.295	0.328	0.077	0.033	0.111
UAE	0.298	0.452	0.541	0.153	0.090	0.243
Uganda	0.132	0.144	0.145	0.012	0.001	0.013
UK	0.622	0.681	0.724	0.059	0.043	0.102
Uruguay	0.532	0.568	0.698	0.036	0.130	0.166
USA	0.809	0.860	0.931	0.051	0.071	0.122
USSR	0.623	0.664	0.696	0.041	0.033	0.074
Venezuela	0.414	0.518	0.555	0.103	0.037	0.140
Yugoslavia	0.437	0.590	0.572	0.154	-0.018	0.135
Zaire	0.157	0.200	0.204	0.043	0.004	0.047
Zambia	0.161	0.191	0.302	0.030	0.111	0.141
Zimbabwe	0.203	0.220	0.286	0.018	0.065	0.083

*Notes. See Technical Note 3 (section 4) for the details concerning the construction of the Mobility Index (MOB) and the sources used. The MOB index is based on a scale from 1.000 (highest possible value) to 0.000 (lowest possible value).

APPENDIX L - Scaled Gender Equity (GEND) Rates*
All Countries (Alphabetical Order)

Country	GEND 1970	GEND 1980	GEND 1990	Country	GEND 1970	GEND 1980	GEND 1990	Country	GEND 1970	GEND 1980	GEND 1990
Afghanistan	0.052	0.072	0.091	Indonesia	0.246	0.341	0.456	Spain	0.445	0.754	0.836
Albania	0.435	0.665	0.728	Iran	0.202	0.327	0.433	Sri Lanka	0.472	0.546	0.686
Algeria	0.080	0.226	0.426	Iraq	0.169	0.375	0.379	Sudan	0.137	0.193	0.265
Angola	0.273	0.281	0.270	Ireland	0.686	0.818	0.864	Sweden	0.797	0.891	0.896
Argentina	0.465	0.567	0.671	Israel	0.589	0.738	0.787	Switzerland	0.514	0.790	0.805
Australia	0.740	0.711	0.802	Italy	0.543	0.665	0.721	Syria	0.212	0.334	0.399
Austria	0.724	0.736	0.813	Ivory Coast	0.230	0.268	0.283	Tanzania	0.287	0.287	0.284
Bangladesh	0.110	0.096	0.121	Jamaica	0.550	0.692	0.713	Thailand	0.361	0.452	0.464
Barbados	0.728	0.886	0.900	Japan	0.815	0.865	0.886	Togo	0.234	0.325	0.266
Belgium	0.729	0.829	0.885	Jordan	0.199	0.555	0.494	Trinid & T.	0.466	0.620	0.738
Benin	0.283	0.330	0.298	Kenya	0.264	0.341	0.351	Tunisia	0.167	0.255	0.416
Bolivia	0.260	0.342	0.359	Korea, S.	0.404	0.682	0.780	Turkey	0.244	0.353	0.283
Botswana	0.277	0.361	0.520	Kuwait	0.441	0.680	0.691	UAE	0.092	0.363	0.535
Brazil	0.307	0.399	0.468	Lesotho	0.311	0.398	0.452	Uganda	0.249	0.256	0.280
Bulgaria	0.791	0.832	0.781	Liberia	0.203	0.266	0.381	UK	0.707	0.808	0.808
Burkina Faso	0.269	0.276	0.286	Libya	0.089	0.416	0.413	Uruguay	0.595	0.591	0.743
Burundi	0.280	0.281	0.284	Luxembourg	0.475	0.609	0.658	USA	0.809	0.859	0.861
Cameroon	0.230	0.287	0.327	Madagascar	0.292	0.294	0.339	USSR	0.789	0.840	0.955
Canada	0.640	0.876	0.918	Malawi	0.252	0.254	0.245	Venezuela	0.358	0.457	0.440
Cen. Afr. Rep.	0.281	0.311	0.287	Malaysia	0.371	0.513	0.597	Yugoslavia	0.608	0.767	0.766
Chad	0.125	0.127	0.136	Mali	0.107	0.128	0.115	Zaire	0.252	0.333	0.296
Chile	0.419	0.539	0.697	Malta	0.458	0.561	0.670	Zambia	0.209	0.224	0.262
China	0.488	0.494	0.522	Mauritius	0.290	0.454	0.518	Zimbabwe	0.244	0.244	0.507
Colombia	0.288	0.440	0.519	Mexico	0.228	0.448	0.518				
Congo	0.302	0.589	0.528	Morocco	0.131	0.238	0.325				
Costa Rica	0.307	0.472	0.421	Mozambique	0.301	0.294	0.291				
Cuba	0.297	0.750	0.854	Myanmar	0.332	0.339	0.363				
Cyprus	0.549	0.856	0.833	Nepal	0.212	0.254	0.288				
Czech.	0.513	0.867	0.865	Netherlands	0.630	0.799	0.869				
Denmark	0.732	0.940	0.945	New Zealand	0.696	0.773	0.828				
Domin. Rep.	0.186	0.296	0.486	Nicaragua	0.228	0.442	0.450				
Ecuador	0.254	0.461	0.503	Niger	0.274	0.283	0.279				
Egypt	0.199	0.336	0.552	Nigeria	0.223	0.293	0.304				
El Salvador	0.262	0.297	0.318	Norway	0.756	0.890	0.896				
Finland	0.940	0.951	0.956	Pakistan	0.084	0.111	0.162				
France	0.741	0.857	0.918	Panama	0.422	0.590	0.587				
Gabon	0.253	0.393	0.356	Papua NG.	0.192	0.241	0.261				
Gambia	0.263	0.278	0.309	Paraguay	0.234	0.297	0.325				
GDR	0.867	0.804	0.783	Peru	0.304	0.509	0.551				
Germany, W.	0.791	0.851	0.886	Philippines	0.474	0.663	0.694				
Ghana	0.285	0.441	0.435	Poland	0.700	0.805	0.839				
Greece	0.527	0.681	0.826	Portugal	0.504	0.476	0.615				
Guatemala	0.127	0.195	0.233	Romania	0.506	0.734	0.886				
Guinea	0.264	0.285	0.248	Rwanda	0.280	0.294	0.298				
Haiti	0.300	0.324	0.371	Saudi Arabia	0.062	0.194	0.331				
Honduras	0.173	0.297	0.347	Senegal	0.266	0.273	0.290				
Hong Kong	0.408	0.658	0.724	Sierra Leone	0.226	0.247	0.264				
Hungary	0.609	0.709	0.798	Singapore	0.468	0.604	0.672				
Iceland	0.721	0.810	0.879	Somalia	0.238	0.252	0.242				
India	0.263	0.301	0.367	South Africa	0.299	0.318	0.693				

*Notes. See Technical Note 3 (section 4) for the details concerning the construction of the GEND variable and the sources used. The GEND variable is based on a scale from 1.000 (highest possible value) to 0.000 (lowest possible value).

APPENDIX M - Scaled % Non-Agricultural Employment (%NAgr) Rates*
All Countries (Alphabetical Order)

Country	%NAgr 1970	%NAgr 1980	%NAgr 1990	Country	%NAgr 1970	%NAgr 1980	%NAgr 1990	Country	%NAgr 1970	%NAgr 1980	%NAgr 1990
Afghanistan	0.180	0.210	0.390	Indonesia	0.340	0.500	0.440	Spain	0.740	0.860	0.890
Albania	0.340	0.390	0.440	Iran	0.540	0.610	0.700	Sri Lanka	0.450	0.460	0.510
Algeria	0.500	0.750	0.820	Iraq	0.580	0.580	0.860	Sudan	0.180	0.280	0.280
Angola	0.360	0.410	0.270	Ireland	0.730	0.820	0.860	Sweden	0.920	0.950	0.970
Argentina	0.840	0.870	0.870	Israel	0.900	0.930	0.960	Switzerland	0.920	0.950	0.940
Australia	0.920	0.940	0.940	Italy	0.810	0.890	0.910	Syria	0.490	0.670	0.770
Austria	0.850	0.910	0.930	Ivory Coast	0.160	0.210	0.350	Tanzania	0.140	0.170	0.150
Bangladesh	0.140	0.260	0.410	Jamaica	0.700	0.790	0.740	Thailand	0.200	0.240	0.330
Barbados	0.790	0.920	0.930	Japan	0.800	0.880	0.930	Togo	0.270	0.330	0.350
Belgium	0.950	0.970	0.970	Jordan	0.660	0.800	0.900	Trinid. & T.	0.770	0.900	0.900
Benin	0.500	0.540	0.300	Kenya	0.180	0.220	0.190	Tunisia	0.500	0.650	0.740
Bolivia	0.450	0.500	0.530	Korea, S.	0.500	0.660	0.830	Turkey	0.330	0.460	0.530
Botswana	0.130	0.220	0.720	Kuwait	0.980	0.980	0.990	UAE	0.790	0.950	0.950
Brazil	0.540	0.700	0.750	Lesotho	0.100	0.130	0.770	Uganda	0.140	0.170	0.140
Bulgaria	0.530	0.630	0.830	Liberia	0.250	0.300	0.250	UK	0.970	0.980	0.980
Burkina Faso	0.130	0.180	0.130	Libya	0.720	0.820	0.800	Uruguay	0.850	0.890	0.950
Burundi	0.130	0.160	0.080	Luxembourg	0.920	0.960	0.970	USA	0.960	0.980	0.970
Cameroon	0.150	0.170	0.210	Madagascar	0.100	0.130	0.190	USSR	0.740	0.860	0.800
Canada	0.920	0.950	0.950	Malawi	0.110	0.140	0.130	Venezuela	0.740	0.820	0.870
Cen. Afr. Rep.	0.090	0.120	0.190	Malaysia	0.440	0.500	0.740	Yugoslavia	0.490	0.710	0.710
Chad	0.100	0.150	0.170	Mali	0.090	0.270	0.150	Zaire	0.210	0.250	0.290
Chile	0.770	0.810	0.810	Malta	0.930	0.950	0.970	Zambia	0.270	0.330	0.620
China	0.230	0.260	0.270	Mauritius	0.660	0.710	0.840	Zimbabwe	0.360	0.400	0.290
Colombia	0.620	0.740	0.900	Mexico	0.550	0.640	0.770				
Congo	0.580	0.660	0.380	Morocco	0.430	0.480	0.540				
Costa Rica	0.580	0.710	0.750	Mozambique	0.270	0.340	0.150				
Cuba	0.670	0.760	0.760	Myanmar	0.300	0.330	0.300				
Cyprus	0.610	0.700	0.850	Nepal	0.060	0.070	0.070				
Czech.	0.830	0.890	0.890	Netherlands	0.920	0.940	0.950				
Denmark	0.890	0.930	0.940	New Zealand	0.880	0.910	0.890				
Domin. Rep.	0.390	0.510	0.540	Nicaragua	0.490	0.570	0.540				
Ecuador	0.490	0.480	0.670	Niger	0.070	0.090	0.150				
Egypt	0.460	0.500	0.580	Nigeria	0.380	0.460	0.520				
El Salvador	0.440	0.490	0.890	Norway	0.880	0.930	0.940				
Finland	0.790	0.890	0.910	Pakistan	0.410	0.430	0.530				
France	0.860	0.920	0.940	Panama	0.580	0.730	0.730				
Gabon	0.190	0.230	0.250	Papua NG.	0.140	0.180	0.240				
Gambia	0.180	0.210	0.160	Paraguay	0.470	0.510	0.520				
GDR	0.870	0.900	0.890	Peru	0.520	0.600	0.650				
Germany, W.	0.920	0.960	0.970	Philippines	0.470	0.540	0.550				
Ghana	0.420	0.470	0.410	Poland	0.610	0.690	0.730				
Greece	0.540	0.630	0.770	Portugal	0.670	0.720	0.830				
Guatemala	0.390	0.450	0.500	Romania	0.510	0.700	0.710				
Guinea	0.150	0.180	0.220	Rwanda	0.070	0.090	0.100				
Haiti	0.260	0.260	0.320	Saudi Arabia	0.340	0.390	0.520				
Honduras	0.330	0.370	0.620	Senegal	0.190	0.230	0.190				
Hong Kong	0.960	0.970	0.990	Sierra Leone	0.290	0.350	0.300				
Hungary	0.750	0.790	0.850	Singapore	0.960	0.980	1.000				
Iceland	0.820	0.870	0.890	Somalia	0.150	0.180	0.240				
India	0.260	0.300	0.380	South Africa	0.690	0.700	0.870				

*Notes. See Technical Note 3 (section 4) for the details concerning the construction of the %NAgr variable and the sources used. The %NAgr variable is based on a scale from 1.000 (highest possible value) to 0.000 (lowest possible value).

APPENDIX N - Scaled Tertiary Enrolment (TERT) Rates*
All Countries (Alphabetical Order)

Country	TERT 1970	TERT 1980	TERT 1990	Country	TERT 1970	TERT 1980	TERT 1990	Country	TERT 1970	TERT 1980	TERT 1990
Afghanistan	0.009	0.021	0.020	Indonesia	0.037	0.051	0.123	Spain	0.119	0.309	0.472
Albania	0.085	0.068	0.093	Iran	0.041	0.065	0.124	Sri Lanka	0.016	0.036	0.069
Algeria	0.025	0.079	0.145	Iraq	0.069	0.116	0.168	Sudan	0.016	0.023	0.037
Angola	0.005	0.005	0.009	Ireland	0.181	0.243	0.391	Sweden	0.285	0.411	0.420
Argentina	0.189	0.285	0.532	Israel	0.267	0.392	0.431	Switzerland	0.133	0.244	0.365
Australia	0.221	0.336	0.467	Italy	0.223	0.360	0.399	Syria	0.123	0.225	0.237
Austria	0.157	0.292	0.457	Ivory Coast	0.012	0.039	0.033	Tanzania	0.003	0.004	0.004
Bangladesh	0.028	0.043	0.045	Jamaica	0.073	0.089	0.079	Thailand	0.023	0.169	0.209
Barbados	0.053	0.193	0.227	Japan	0.227	0.407	0.383	Togo	0.007	0.028	0.033
Belgium	0.233	0.347	0.504	Jordan	0.029	0.355	0.289	Trinid. & T.	0.037	0.059	0.085
Benin	0.001	0.015	0.036	Kenya	0.011	0.012	0.020	Tunisia	0.039	0.065	0.112
Bolivia	0.124	0.213	0.275	Korea, S.	0.105	0.196	0.503	Turkey	0.080	0.072	0.172
Botswana	0.005	0.017	0.041	Kuwait	0.049	0.151	0.197	UAE	0.013	0.041	0.139
Brazil	0.068	0.148	0.151	Lesotho	0.007	0.023	0.049	Uganda	0.007	0.007	0.015
Bulgaria	0.192	0.216	0.401	Liberia	0.013	0.032	0.033	UK	0.188	0.255	0.384
Burkina Faso	0.001	0.004	0.009	Libya	0.041	0.104	0.219	Uruguay	0.151	0.223	0.401
Burundi	0.003	0.007	0.009	Luxembourg	0.021	0.035	0.032	USA	0.659	0.741	0.963
Cameroon	0.007	0.021	0.043	Madagascar	0.013	0.036	0.043	USSR	0.339	0.292	0.335
Canada	0.461	0.547	0.949	Malawi	0.004	0.008	0.009	Venezuela	0.145	0.276	0.355
Cen. Afr. Rep.	0.001	0.012	0.019	Malaysia	0.021	0.055	0.063	Yugoslavia	0.212	0.293	0.240
Chad	0.000	0.003	0.011	Mali	0.003	0.011	0.011	Zaire	0.009	0.016	0.025
Chile	0.125	0.165	0.275	Malta	0.076	0.043	0.156	Zambia	0.005	0.019	0.025
China	0.001	0.016	0.023	Mauritius	0.039	0.011	0.029	Zimbabwe	0.004	0.017	0.060
Colombia	0.064	0.121	0.189	Mexico	0.079	0.188	0.187				
Congo	0.024	0.068	0.071	Morocco	0.020	0.079	0.132				
Costa Rica	0.141	0.280	0.351	Mozambique	0.004	0.001	0.003				
Cuba	0.049	0.231	0.277	Myanmar	0.029	0.063	0.064				
Cyprus	0.019	0.041	0.200	Nepal	0.031	0.036	0.067				
Czech.	0.139	0.232	0.227	Netherlands	0.260	0.391	0.468				
Denmark	0.245	0.377	0.448	New Zealand	0.232	0.360	0.593				
Domin. Rep.	0.084	0.128	0.248	Nicaragua	0.076	0.172	0.124				
Ecuador	0.105	0.453	0.255	Niger	0.001	0.004	0.009				
Egypt	0.107	0.231	0.245	Nigeria	0.007	0.028	0.047				
El Salvador	0.044	0.055	0.203	Norway	0.212	0.340	0.560				
Finland	0.177	0.429	0.643	Pakistan	0.031	0.024	0.035				
France	0.260	0.333	0.528	Panama	0.096	0.273	0.279				
Gabon	0.005	0.033	0.049	Papua NG.	0.007	0.025	0.023				
Gambia	0.001	0.009	0.009	Paraguay	0.057	0.111	0.108				
GDR	0.437	0.399	0.464	Peru	0.147	0.231	0.441				
Germany, W.	0.179	0.341	0.508	Philippines	0.264	0.323	0.325				
Ghana	0.011	0.021	0.019	Poland	0.187	0.241	0.292				
Greece	0.180	0.228	0.339	Portugal	0.107	0.143	0.301				
Guatemala	0.045	0.108	0.115	Romania	0.135	0.161	0.115				
Guinea	0.008	0.060	0.019	Rwanda	0.003	0.004	0.008				
Haiti	0.009	0.012	0.016	Saudi Arabia	0.023	0.096	0.167				
Honduras	0.031	0.101	0.111	Senegal	0.019	0.036	0.039				
Hong Kong	0.099	0.139	0.235	Sierra Leone	0.007	0.011	0.019				
Hungary	0.135	0.188	0.193	Singapore	0.091	0.104	0.107				
Iceland	0.135	0.231	0.341	Somalia	0.005	0.007	0.031				
India	0.083	0.069	0.089	South Africa	0.060	0.065	0.179				

*Notes. See Technical Note 3 (section 4) for the details concerning the construction of the TERT variable and the sources used. The TERT variable is based on a scale from 1.000 (highest possible value) to 0.000 (lowest possible value).

APPENDIX O - Integrated Human Development Index (I-HDI) Values*
Part 1. All Countries (Alphabetical Order)

Country	I-HDI 1970	I-HDI 1980	I-HDI 1990	I-HDI 1970/80	I-HDI 1980/90	I-HDI 1970/90
Afghanistan	0.313	0.224	0.216	-0.089	-0.008	-0.097
Albania	0.556	0.627	0.698	0.071	0.072	0.142
Algeria	0.451	0.531	0.596	0.080	0.064	0.145
Angola	0.268	0.235	0.195	-0.033	-0.040	-0.073
Argentina	0.715	0.629	0.772	-0.085	0.142	0.057
Australia	0.884	0.885	0.921	0.001	0.036	0.037
Austria	0.873	0.888	0.923	0.015	0.034	0.050
Bangladesh	0.307	0.326	0.387	0.019	0.061	0.080
Barbados	0.841	0.862	0.902	0.021	0.040	0.062
Belgium	0.877	0.890	0.926	0.013	0.036	0.049
Benin	0.386	0.389	0.435	0.003	0.046	0.049
Bolivia	0.507	0.518	0.537	0.011	0.020	0.031
Botswana	0.468	0.548	0.712	0.080	0.164	0.244
Brazil	0.499	0.625	0.678	0.127	0.053	0.180
Bulgaria	0.683	0.758	0.772	0.075	0.014	0.089
Burkina Faso	0.358	0.365	0.390	0.008	0.025	0.032
Burundi	0.238	0.370	0.419	0.132	0.050	0.181
Cameroon	0.439	0.444	0.520	0.005	0.076	0.082
Canada	0.900	0.915	0.950	0.015	0.035	0.049
Cen. Afr. Rep.	0.354	0.376	0.409	0.022	0.032	0.054
Chad	0.268	0.297	0.350	0.029	0.054	0.082
Chile	0.621	0.652	0.804	0.030	0.152	0.183
China	0.390	0.463	0.613	0.073	0.151	0.223
Colombia	0.646	0.641	0.724	-0.004	0.083	0.079
Congo	0.440	0.490	0.557	0.050	0.067	0.116
Costa Rica	0.742	0.786	0.825	0.044	0.039	0.083
Cuba	0.613	0.728	0.697	0.115	-0.031	0.084
Cyprus	0.731	0.821	0.880	0.090	0.059	0.149
Czech.	0.696	0.801	0.831	0.104	0.030	0.135
Denmark	0.885	0.897	0.921	0.011	0.025	0.036
Dominican Rep.	0.578	0.630	0.663	0.051	0.034	0.085
Ecuador	0.597	0.687	0.697	0.090	0.010	0.100
Egypt	0.324	0.490	0.628	0.166	0.137	0.304
El Salvador	0.541	0.479	0.521	-0.063	0.042	-0.021
Finland	0.859	0.873	0.920	0.014	0.047	0.061
France	0.868	0.878	0.913	0.011	0.035	0.045
Gabon	0.467	0.499	0.581	0.031	0.083	0.114
Gambia	0.381	0.386	0.417	0.005	0.032	0.036
GDR	0.749	0.802	0.836	0.052	0.034	0.086
Germany, W.	0.879	0.882	0.919	0.003	0.036	0.040
Ghana	0.430	0.429	0.440	-0.001	0.010	0.010
Greece	0.677	0.821	0.847	0.144	0.027	0.171
Guatemala	0.478	0.495	0.566	0.017	0.071	0.088
Guinea	0.305	0.328	0.341	0.023	0.013	0.036

Appendix O, Part 1 (cont'd)

Country	I-HDI 1970	I-HDI 1980	I-HDI 1990	I-HDI 1970/80	I-HDI 1980/90	I-HDI 1970/90
Haiti	0.394	0.438	0.498	0.043	0.060	0.104
Honduras	0.489	0.565	0.630	0.076	0.065	0.141
Hong Kong	0.791	0.836	0.869	0.045	0.033	0.078
Hungary	0.705	0.798	0.836	0.092	0.038	0.130
Iceland	0.879	0.837	0.866	-0.042	0.029	-0.013
India	0.357	0.427	0.467	0.070	0.039	0.109
Indonesia	0.271	0.401	0.602	0.131	0.200	0.331
Iran	0.507	0.436	0.566	-0.071	0.130	0.059
Iraq	0.421	0.468	0.520	0.047	0.052	0.099
Ireland	0.836	0.862	0.903	0.027	0.040	0.067
Israel	0.720	0.766	0.768	0.046	0.001	0.047
Italy	0.836	0.841	0.892	0.005	0.051	0.056
Ivory Coast	0.405	0.456	0.505	0.051	0.049	0.100
Jamaica	0.739	0.684	0.765	-0.055	0.081	0.026
Japan	0.884	0.906	0.934	0.022	0.028	0.050
Jordan	0.419	0.620	0.689	0.202	0.069	0.270
Kenya	0.456	0.492	0.512	0.037	0.019	0.056
Korea, S.	0.563	0.657	0.849	0.094	0.192	0.287
Kuwait	0.728	0.768	0.740	0.040	-0.027	0.012
Lesotho	0.475	0.502	0.555	0.027	0.053	0.080
Liberia	0.382	0.413	0.395	0.030	-0.017	0.013
Libya	0.467	0.617	0.657	0.150	0.039	0.190
Luxembourg	0.854	0.872	0.898	0.018	0.026	0.045
Madagascar	0.462	0.441	0.493	-0.021	0.052	0.030
Malawi	0.339	0.344	0.373	0.005	0.029	0.034
Malaysia	0.595	0.684	0.758	0.089	0.073	0.163
Mali	0.293	0.319	0.372	0.026	0.053	0.079
Malta	0.729	0.814	0.866	0.085	0.052	0.137
Mauritius	0.656	0.668	0.797	0.012	0.128	0.141
Mexico	0.687	0.727	0.696	0.040	-0.031	0.009
Morocco	0.468	0.481	0.582	0.013	0.101	0.114
Mozambique	0.295	0.272	0.211	-0.023	-0.060	-0.084
Myanmar	0.455	0.445	0.446	-0.010	0.001	-0.009
Nepal	0.360	0.406	0.447	0.046	0.041	0.087
Netherlands	0.880	0.896	0.933	0.017	0.036	0.053
New Zealand	0.879	0.878	0.908	-0.001	0.029	0.028
Nicaragua	0.558	0.497	0.516	-0.061	0.019	-0.041
Niger	0.333	0.340	0.391	0.007	0.052	0.058
Nigeria	0.330	0.434	0.471	0.104	0.037	0.141
Norway	0.889	0.904	0.931	0.015	0.028	0.043
Pakistan	0.322	0.398	0.513	0.075	0.116	0.191
Panama	0.632	0.718	0.774	0.086	0.056	0.142
Papua New G.	0.516	0.532	0.573	0.016	0.041	0.057
Paraguay	0.573	0.626	0.659	0.052	0.033	0.086
Peru	0.576	0.575	0.559	-0.001	-0.016	-0.016
Philippines	0.503	0.529	0.621	0.026	0.092	0.118

Appendix O, Part 1 (cont'd)

Country	I-HDI 1970	I-HDI 1980	I-HDI 1990	I-HDI 1970/80	I-HDI 1980/90	I-HDI 1970/90
Poland	0.694	0.806	0.728	0.112	-0.079	0.034
Portugal	0.533	0.756	0.823	0.223	0.066	0.290
Romania	0.642	0.743	0.691	0.102	-0.053	0.049
Rwanda	0.362	0.375	0.390	0.013	0.015	0.028
Saudi Arabia	0.539	0.578	0.650	0.039	0.072	0.111
Senegal	0.370	0.426	0.490	0.056	0.064	0.120
Sierra Leone	0.355	0.357	0.305	0.002	-0.052	-0.050
Singapore	0.717	0.765	0.816	0.048	0.051	0.099
Somalia	0.271	0.247	0.183	-0.024	-0.064	-0.089
South Africa	0.606	0.593	0.619	-0.013	0.026	0.013
Spain	0.746	0.826	0.892	0.079	0.067	0.146
Sri Lanka	0.595	0.615	0.620	0.019	0.005	0.024
Sudan	0.264	0.288	0.267	0.025	-0.021	0.004
Sweden	0.896	0.903	0.924	0.007	0.021	0.028
Switzerland	0.876	0.902	0.926	0.027	0.024	0.051
Syria	0.405	0.545	0.643	0.140	0.098	0.238
Tanzania	0.388	0.380	0.403	-0.009	0.024	0.015
Thailand	0.541	0.607	0.764	0.067	0.157	0.223
Togo	0.395	0.412	0.455	0.018	0.043	0.060
Trinidad & T.	0.789	0.802	0.868	0.013	0.067	0.080
Tunisia	0.483	0.577	0.714	0.094	0.137	0.231
Turkey	0.516	0.531	0.615	0.014	0.084	0.099
UAE	0.578	0.704	0.765	0.126	0.061	0.186
Uganda	0.274	0.213	0.262	-0.061	0.049	-0.012
UK	0.864	0.858	0.897	-0.006	0.038	0.032
Uruguay	0.674	0.692	0.777	0.018	0.086	0.104
USA	0.811	0.900	0.896	0.089	-0.004	0.085
USSR	0.705	0.684	0.727	-0.021	0.043	0.021
Venezuela	0.773	0.789	0.786	0.017	-0.003	0.013
Yugoslavia	0.611	0.743	0.627	0.132	-0.115	0.017
Zaire	0.348	0.384	0.376	0.036	-0.008	0.028
Zambia	0.457	0.467	0.430	0.010	-0.037	-0.027
Zimbabwe	0.452	0.466	0.540	0.014	0.074	0.088

*Notes. The construction of the Integrated Human Development Index (I-HDI) was explained in Chapter 3. The I-HDI is based on a scale from 1.000 (highest possible value) to 0.000 (lowest possible value).

Appendix O (cont'd) **Part 2. Country Ranks By I-HDI Values (1970, 1980, 1990)**

Ra	Country	I-HDI 1970	Ra	Country	I-HDI 1980	Ra	Country	I-HDI 1990
1	Canada	0.900	1	Canada	0.915	1	Canada	0.950
2	Sweden	0.896	2	Japan	0.906	2	Japan	0.934
3	Norway	0.889	3	Norway	0.904	3	Netherlands	0.933
4	Denmark	0.885	4	Sweden	0.903	4	Norway	0.931
5	Australia	0.884	5	Switzerland	0.902	5	Switzerland	0.926
6	Japan	0.884	6	USA	0.900	6	Belgium	0.926
7	Netherlands	0.880	7	Denmark	0.897	7	Sweden	0.924
8	New Zealand	0.879	8	Netherlands	0.896	8	Austria	0.923
9	Iceland	0.879	9	Belgium	0.890	9	Denmark	0.921
10	Germany, W.	0.879	10	Austria	0.888	10	Australia	0.921
11	Belgium	0.877	11	Australia	0.885	11	Finland	0.920
12	Switzerland	0.876	12	Germany, W.	0.882	12	Germany, W.	0.919
13	Austria	0.873	13	New Zealand	0.878	13	France	0.913
14	France	0.868	14	France	0.878	14	New Zealand	0.908
15	UK	0.864	15	Finland	0.873	15	Ireland	0.903
16	Finland	0.859	16	Luxembourg	0.872	16	Barbados	0.902
17	Luxembourg	0.854	17	Ireland	0.862	17	Luxembourg	0.898
18	Barbados	0.841	18	Barbados	0.862	18	UK	0.897
19	Italy	0.836	19	UK	0.858	19	USA	0.896
20	Ireland	0.836	20	Italy	0.841	20	Spain	0.892
21	USA	0.811	21	Iceland	0.837	21	Italy	0.892
22	Hong Kong	0.791	22	Hong Kong	0.836	22	Cyprus	0.880
23	Trinidad & T.	0.789	23	Spain	0.826	23	Hong Kong	0.869
24	Venezuela	0.773	24	Cyprus	0.821	24	Trinidad & T.	0.868
25	GDR	0.749	25	Greece	0.821	25	Malta	0.866
26	Spain	0.746	26	Malta	0.814	26	Iceland	0.866
27	Costa Rica	0.742	27	Poland	0.806	27	Korea, S.	0.849
28	Jamaica	0.739	28	Trinidad & T.	0.802	28	Greece	0.847
29	Cyprus	0.731	29	GDR	0.802	29	GDR	0.836
30	Malta	0.729	30	Czech.	0.801	30	Hungary	0.836
31	Kuwait	0.728	31	Hungary	0.798	31	Czech.	0.831
32	Israel	0.720	32	Venezuela	0.789	32	Costa Rica	0.825
33	Singapore	0.717	33	Costa Rica	0.786	33	Portugal	0.823
34	Argentina	0.715	34	Kuwait	0.768	34	Singapore	0.816
35	Hungary	0.705	35	Israel	0.766	35	Chile	0.804
36	USSR	0.705	36	Singapore	0.765	36	Mauritius	0.797
37	Czech.	0.696	37	Bulgaria	0.758	37	Venezuela	0.786
38	Poland	0.694	38	Portugal	0.756	38	Uruguay	0.777
39	Mexico	0.687	39	Romania	0.743	39	Panama	0.774
40	Bulgaria	0.683	40	Yugoslavia	0.743	40	Bulgaria	0.772
41	Greece	0.677	41	Cuba	0.728	41	Argentina	0.772
42	Uruguay	0.674	42	Mexico	0.727	42	Israel	0.768
43	Mauritius	0.656	43	Panama	0.718	43	Jamaica	0.765
44	Colombia	0.646	44	UAE	0.704	44	UAE	0.765
45	Romania	0.642	45	Uruguay	0.692	45	Thailand	0.764
46	Panama	0.632	46	Ecuador	0.687	46	Malaysia	0.758

Appendix O, Part 2. (cont'd)

Ra	Country	I-HDI 1970	Ra	Country	I-HDI 1980	Ra	Country	I-HDI 1990
47	Chile	0.621	47	Malaysia	0.684	47	Kuwait	0.740
48	Cuba	0.613	48	Jamaica	0.684	48	Poland	0.728
49	Yugoslavia	0.611	49	USSR	0.684	49	USSR	0.727
50	South Africa	0.606	50	Mauritius	0.668	50	Colombia	0.724
51	Ecuador	0.597	51	Korea, S.	0.657	51	Tunisia	0.714
52	Sri Lanka	0.595	52	Chile	0.652	52	Botswana	0.712
53	Malaysia	0.595	53	Colombia	0.641	53	Albania	0.698
54	Domin. Rep.	0.578	54	Domin. Rep.	0.630	54	Cuba	0.697
55	UAE	0.578	55	Argentina	0.629	55	Ecuador	0.697
56	Peru	0.576	56	Albania	0.627	56	Mexico	0.696
57	Paraguay	0.573	57	Paraguay	0.626	57	Romania	0.691
58	Korea, S.	0.563	58	Brazil	0.625	58	Jordan	0.689
59	Nicaragua	0.558	59	Jordan	0.620	59	Brazil	0.678
60	Albania	0.556	60	Libya	0.617	60	Domin. Rep.	0.663
61	El Salvador	0.541	61	Sri Lanka	0.615	61	Paraguay	0.659
62	Thailand	0.541	62	Thailand	0.607	62	Libya	0.657
63	Saudi Arabia	0.539	63	South Africa	0.593	63	Saudi Arabia	0.650
64	Portugal	0.533	64	Saudi Arabia	0.578	64	Syria	0.643
65	Turkey	0.516	65	Tunisia	0.577	65	Honduras	0.630
66	Papua New G.	0.516	66	Peru	0.575	66	Egypt	0.628
67	Bolivia	0.507	67	Honduras	0.565	67	Yugoslavia	0.627
68	Iran	0.507	68	Botswana	0.548	68	Philippines	0.621
69	Philippines	0.503	69	Syria	0.545	69	Sri Lanka	0.620
70	Brazil	0.499	70	Papua New G.	0.532	70	South Africa	0.619
71	Honduras	0.489	71	Algeria	0.531	71	Turkey	0.615
72	Tunisia	0.483	72	Turkey	0.531	72	China	0.613
73	Guatemala	0.478	73	Philippines	0.529	73	Indonesia	0.602
74	Lesotho	0.475	74	Bolivia	0.518	74	Algeria	0.596
75	Morocco	0.468	75	Lesotho	0.502	75	Morocco	0.582
76	Botswana	0.468	76	Gabon	0.499	76	Gabon	0.581
77	Gabon	0.467	77	Nicaragua	0.497	77	Papua New G.	0.573
78	Libya	0.467	78	Guatemala	0.495	78	Guatemala	0.566
79	Madagascar	0.462	79	Kenya	0.492	79	Iran	0.566
80	Zambia	0.457	80	Egypt	0.490	80	Peru	0.559
81	Kenya	0.456	81	Congo	0.490	81	Congo	0.557
82	Myanmar	0.455	82	Morocco	0.481	82	Lesotho	0.555
83	Zimbabwe	0.452	83	El Salvador	0.479	83	Zimbabwe	0.540
84	Algeria	0.451	84	Iraq	0.468	84	Bolivia	0.537
85	Congo	0.440	85	Zambia	0.467	85	El Salvador	0.521
86	Cameroon	0.439	86	Zimbabwe	0.466	86	Iraq	0.520
87	Ghana	0.430	87	China	0.463	87	Cameroon	0.520
88	Iraq	0.421	88	Ivory Coast	0.456	88	Nicaragua	0.516
89	Jordan	0.419	89	Myanmar	0.445	89	Pakistan	0.513
90	Syria	0.405	90	Cameroon	0.444	90	Kenya	0.512
91	Ivory Coast	0.405	91	Madagascar	0.441	91	Ivory Coast	0.505
92	Togo	0.395	92	Haiti	0.438	92	Haiti	0.498

Appendix O, Part 2. (cont'd)

Ra	Country	I-HDI 1970	Ra	Country	I-HDI 1980	Ra	Country	I-HDI 1990
93	Haiti	0.394	93	Iran	0.436	93	Madagascar	0.493
94	China	0.390	94	Nigeria	0.434	94	Senegal	0.490
95	Tanzania	0.388	95	Ghana	0.429	95	Nigeria	0.471
96	Benin	0.386	96	India	0.427	96	India	0.467
97	Liberia	0.382	97	Senegal	0.426	97	Togo	0.455
98	Gambia	0.381	98	Liberia	0.413	98	Nepal	0.447
99	Senegal	0.370	99	Togo	0.412	99	Myanmar	0.446
100	Rwanda	0.362	100	Nepal	0.406	100	Ghana	0.440
101	Nepal	0.360	101	Indonesia	0.401	101	Benin	0.435
102	Burkina Faso	0.358	102	Pakistan	0.398	102	Zambia	0.430
103	India	0.357	103	Benin	0.389	103	Burundi	0.419
104	Sierra Leone	0.355	104	Gambia	0.386	104	Gambia	0.417
105	Cen. Afr. Rep.	0.354	105	Zaire	0.384	105	Cen. Afr. Rep.	0.409
106	Zaire	0.348	106	Tanzania	0.380	106	Tanzania	0.403
107	Malawi	0.339	107	Cen. Afr. Rep.	0.376	107	Liberia	0.395
108	Niger	0.333	108	Rwanda	0.375	108	Niger	0.391
109	Nigeria	0.330	109	Burundi	0.370	109	Rwanda	0.390
110	Egypt	0.324	110	Burkina Faso	0.365	110	Burkina Faso	0.390
111	Pakistan	0.322	111	Sierra Leone	0.357	111	Bangladesh	0.387
112	Afghanistan	0.313	112	Malawi	0.344	112	Zaire	0.376
113	Bangladesh	0.307	113	Niger	0.340	113	Malawi	0.373
114	Guinea	0.305	114	Guinea	0.328	114	Mali	0.372
115	Mozambique	0.295	115	Bangladesh	0.326	115	Chad	0.350
116	Mali	0.293	116	Mali	0.319	116	Guinea	0.341
117	Uganda	0.274	117	Chad	0.297	117	Sierra Leone	0.305
118	Somalia	0.271	118	Sudan	0.288	118	Sudan	0.267
119	Indonesia	0.271	119	Mozambique	0.272	119	Uganda	0.262
120	Angola	0.268	120	Somalia	0.247	120	Afghanistan	0.216
121	Chad	0.268	121	Angola	0.235	121	Mozambique	0.211
122	Sudan	0.264	122	Afghanistan	0.224	122	Angola	0.195
123	Burundi	0.238	123	Uganda	0.213	123	Somalia	0.183

APPENDIX P - Gross Domestic Product Per Capita (GDP/C, $US) Values
Part 1. All Countries (Alphabetical Order)

Country	GDP/C 1970	GDP/C 1980	GDP/C 1990	Country	GDP/C 1970	GDP/C 1980	GDP/C 1990	Country	GDP/C 1970	GDP/C 1980	GDP/C 1990
Afghanistan	93	219	400	Indonesia	79	517	520	Spain	1110	5650	9602
Albania	389	881	1016	Iran	388	2488	2720	Sri Lanka	190	279	405
Algeria	376	2260	2024	Iraq	391	2848	3220	Sudan	167	209	240
Angola	137	363	665	Ireland	1316	5654	9200	Sweden	4164	15028	22538
Argentina	991	5462	1892	Israel	1921	5888	10168	Switzerland	3351	16083	26894
Australia	3133	10599	17516	Italy	1997	8021	15166	Syria	344	1484	884
Austria	1936	10183	16688	Ivory Coast	271	1242	849	Tanzania	101	279	107
Bangladesh	97	179	218	Jamaica	748	1250	1600	Thailand	198	688	1269
Barbados	553	3442	6656	Japan	1953	9068	23052	Togo	130	432	381
Belgium	2597	11979	15535	Jordan	258	1373	1147	Trinid & T.	847	5763	3209
Benin	93	336	355	Kenya	148	426	357	Tunisia	281	1370	1251
Bolivia	234	900	609	Korea, S.	279	1643	5030	Turkey	358	1281	1461
Botswana	134	990	1989	Kuwait	3856	20688	11672	UAE	2976	29159	17635
Brazil	454	1877	3270	Lesotho	66	274	234	Uganda	197	124	173
Bulgaria	735	2059	2878	Liberia	224	488	497	UK	2219	9487	14482
Burkina Faso	54	185	216	Libya	1873	11735	5094	Uruguay	856	3477	2736
Burundi	70	230	207	Luxembourg	3238	12454	18864	USA	4922	11804	20749
Cameroon	175	779	986	Madagascar	133	372	139	USSR	1592	3409	5053
Canada	3960	10947	20739	Malawi	71	201	195	Venezuela	1299	4644	2353
Cen. Afr. Rep.	97	343	374	Malaysia	319	1779	2149	Yugoslavia	714	3136	3456
Chad	89	205	165	Mali	63	243	236	Zaire	95	234	102
Chile	858	2474	1958	Malta	698	3109	5479	Zambia	427	677	388
China	111	305	381	Mauritius	271	1170	1939	Zimbabwe	287	751	625
Colombia	337	1241	1219	Mexico	704	2766	2396				
Congo	217	1022	1031	Morocco	258	971	916				
Costa Rica	569	2114	1807	Mozambique	108	199	84				
Cuba	701	1575	1884	Myanmar	104	165	303				
Cyprus	1579	3419	6481	Nepal	75	131	164				
Czech.	1378	2704	3322	Netherlands	2568	11975	15059				
Denmark	3209	12943	20373	New Zealand	2233	7113	12113				
Domin. Rep.	336	1164	953	Nicaragua	378	786	792				
Ecuador	277	1444	1005	Niger	96	454	266				
Egypt	255	526	652	Nigeria	175	1125	157				
El Salvador	287	788	1121	Norway	2884	14124	21636				
Finland	2364	10802	23258	Pakistan	162	333	386				
France	2814	12335	17124	Panama	667	1818	1919				
Gabon	664	5305	2978	Papua NG.	317	896	926				
Gambia	116	425	334	Paraguay	253	1413	990				
GDR	2010	7492	11811	Peru	529	1161	1356				
Germany, W.	3042	13216	19406	Philippines	187	729	728				
Ghana	257	1451	353	Poland	1870	1710	1865				
Greece	1133	4163	5400	Portugal	684	2569	4414				
Guatemala	363	1139	949	Romania	640	1530	2315				
Guinea	518	385	432	Rwanda	58	225	310				
Haiti	73	267	439	Saudi Arabia	673	12373	5538				
Honduras	263	695	660	Senegal	208	536	690				
Hong Kong	916	5467	10877	Sierra Leone	156	337	251				
Hungary	537	2069	2733	Singapore	914	4852	10539				
Iceland	2430	14105	20598	Somalia	93	515	173				
India	104	250	317	South Africa	768	2740	2569				

Part 2. Country Ranks By GDP/C Values (1970, 1980, 1990)

Ra	Country	GDP/C 1970	Ra	Country	GDP/C 1980	Ra	Country	GDP/C 1990
1	USA	4922	1	UAE	29159	1	Switzerland	26894
2	Sweden	4164	2	Kuwait	20688	2	Finland	23258
3	Canada	3960	3	Switzerland	16083	3	Japan	23052
4	Kuwait	3856	4	Sweden	15028	4	Sweden	22538
5	Switzerland	3351	5	Norway	14124	5	Norway	21636
6	Luxembourg	3238	6	Iceland	14105	6	USA	20749
7	Denmark	3209	7	Germany, W.	13216	7	Canada	20739
8	Australia	3133	8	Denmark	12943	8	Iceland	20598
9	Germany, W.	3042	9	Luxembourg	12454	9	Denmark	20373
10	UAE	2976	10	Saudi Arabia	12373	10	Germany, W.	19406
11	Norway	2884	11	France	12335	11	Luxembourg	18864
12	France	2814	12	Belgium	11979	12	UAE	17635
13	Belgium	2597	13	Netherlands	11975	13	Australia	17516
14	Netherlands	2568	14	USA	11804	14	France	17124
15	Iceland	2430	15	Libya	11735	15	Austria	16688
16	Finland	2364	16	Canada	10947	16	Belgium	15535
17	New Zealand	2233	17	Finland	10802	17	Italy	15166
18	UK	2219	18	Australia	10599	18	Netherlands	15059
19	GDR	2010	19	Austria	10183	19	UK	14482
20	Italy	1997	20	UK	9487	20	New Zealand	12113
21	Japan	1953	21	Japan	9068	21	GDR	11811
22	Austria	1936	22	Italy	8021	22	Kuwait	11672
23	Israel	1921	23	GDR	7492	23	Hong Kong	10877
24	Libya	1873	24	New Zealand	7113	24	Singapore	10539
25	Poland	1870	25	Israel	5888	25	Israel	10168
26	USSR	1592	26	Trinidad & T.	5763	26	Spain	9602
27	Cyprus	1579	27	Ireland	5654	27	Ireland	9200
28	Czech.	1378	28	Spain	5650	28	Barbados	6656
29	Ireland	1316	29	Hong Kong	5467	29	Cyprus	6481
30	Venezuela	1299	30	Argentina	5462	30	Saudi Arabia	5538
31	Greece	1133	31	Gabon	5305	31	Malta	5479
32	Spain	1110	32	Singapore	4852	32	Greece	5400
33	Argentina	991	33	Venezuela	4644	33	Libya	5094
34	Hong Kong	916	34	Greece	4163	34	USSR	5053
35	Singapore	914	35	Uruguay	3477	35	Korea, S.	5030
36	Chile	858	36	Barbados	3442	36	Portugal	4414
37	Uruguay	856	37	Cyprus	3419	37	Yugoslavia	3456
38	Trinidad & T.	847	38	USSR	3409	38	Czech.	3322
39	South Africa	768	39	Yugoslavia	3136	39	Brazil	3270
40	Jamaica	748	40	Malta	3109	40	Iraq	3220
41	Bulgaria	735	41	Iraq	2848	41	Trinidad & T.	3209
42	Yugoslavia	714	42	Mexico	2766	42	Gabon	2978
43	Mexico	704	43	South Africa	2740	43	Bulgaria	2878
44	Cuba	701	44	Czech.	2704	44	Uruguay	2736
45	Malta	698	45	Portugal	2569	45	Hungary	2733
46	Portugal	684	46	Iran	2488	46	Iran	2720

Appendix P, Part 2. (cont'd)

Ra	Country	GDP/C 1970	Ra	Country	GDP/C 1980	Ra	Country	GDP/C 1990
47	Saudi Arabia	673	47	Chile	2474	47	South Africa	2569
48	Panama	667	48	Algeria	2260	48	Mexico	2396
49	Gabon	664	49	Costa Rica	2114	49	Venezuela	2353
50	Romania	640	50	Hungary	2069	50	Romania	2315
51	Costa Rica	569	51	Bulgaria	2059	51	Malaysia	2149
52	Barbados	553	52	Brazil	1877	52	Algeria	2024
53	Hungary	537	53	Panama	1818	53	Botswana	1989
54	Peru	529	54	Malaysia	1779	54	Chile	1958
55	Guinea	518	55	Poland	1710	55	Mauritius	1939
56	Brazil	454	56	Korea, S.	1643	56	Panama	1919
57	Zambia	427	57	Cuba	1575	57	Argentina	1892
58	Iraq	391	58	Romania	1530	58	Cuba	1884
59	Albania	389	59	Syria	1484	59	Poland	1865
60	Iran	388	60	Ghana	1451	60	Costa Rica	1807
61	Nicaragua	378	61	Ecuador	1444	61	Jamaica	1600
62	Algeria	376	62	Paraguay	1413	62	Turkey	1461
63	Guatemala	363	63	Jordan	1373	63	Peru	1356
64	Turkey	358	64	Tunisia	1370	64	Thailand	1269
65	Syria	344	65	Turkey	1281	65	Tunisia	1251
66	Colombia	337	66	Jamaica	1250	66	Colombia	1219
67	Domin. Rep.	336	67	Ivory Coast	1242	67	Jordan	1147
68	Malaysia	319	68	Colombia	1241	68	El Salvador	1121
69	Papua New G.	317	69	Mauritius	1170	69	Congo	1031
70	El Salvador	287	70	Domin. Rep.	1164	70	Albania	1016
71	Zimbabwe	287	71	Peru	1161	71	Ecuador	1005
72	Tunisia	281	72	Guatemala	1139	72	Paraguay	990
73	Korea, S.	279	73	Nigeria	1125	73	Cameroon	986
74	Ecuador	277	74	Congo	1022	74	Domin. Rep.	953
75	Mauritius	271	75	Botswana	990	75	Guatemala	949
76	Ivory Coast	271	76	Morocco	971	76	Papua New G.	926
77	Honduras	263	77	Bolivia	900	77	Morocco	916
78	Jordan	258	78	Papua New G.	896	78	Syria	884
79	Morocco	258	79	Albania	881	79	Ivory Coast	849
80	Ghana	257	80	El Salvador	788	80	Nicaragua	792
81	Egypt	255	81	Nicaragua	786	81	Philippines	728
82	Paraguay	253	82	Cameroon	779	82	Senegal	690
83	Bolivia	234	83	Zimbabwe	751	83	Angola	665
84	Liberia	224	84	Philippines	729	84	Honduras	660
85	Congo	217	85	Honduras	695	85	Egypt	652
86	Senegal	208	86	Thailand	688	86	Zimbabwe	625
87	Thailand	198	87	Zambia	677	87	Bolivia	609
88	Uganda	197	88	Senegal	536	88	Indonesia	520
89	Sri Lanka	190	89	Egypt	526	89	Liberia	497
90	Philippines	187	90	Indonesia	517	90	Haiti	439
91	Cameroon	175	91	Somalia	515	91	Guinea	432
92	Nigeria	175	92	Liberia	488	92	Sri Lanka	405

Appendix P, Part 2. (cont'd)

Ra	Country	GDP/C 1970	Ra	Country	GDP/C 1980	Ra	Country	GDP/C 1990
93	Sudan	167	93	Niger	454	93	Afghanistan	400
94	Pakistan	162	94	Togo	432	94	Zambia	388
95	Sierra Leone	156	95	Kenya	426	95	Pakistan	386
96	Kenya	148	96	Gambia	425	96	China	381
97	Angola	137	97	Guinea	385	97	Togo	381
98	Botswana	134	98	Madagascar	372	98	Cen. Afr. Rep.	374
99	Madagascar	133	99	Angola	363	99	Kenya	357
100	Togo	130	100	Cen. Afr. Rep.	343	100	Benin	355
101	Gambia	116	101	Sierra Leone	337	101	Ghana	353
102	China	111	102	Benin	336	102	Gambia	334
103	Mozambique	108	103	Pakistan	333	103	India	317
104	India	104	104	China	305	104	Rwanda	310
105	Myanmar	104	105	Sri Lanka	279	105	Myanmar	303
106	Tanzania	101	106	Tanzania	279	106	Niger	266
107	Bangladesh	97	107	Lesotho	274	107	Sierra Leone	251
108	Cen. Afr. Rep.	97	108	Haiti	267	108	Sudan	240
109	Niger	96	109	India	250	109	Mali	236
110	Zaire	95	110	Mali	243	110	Lesotho	234
111	Afghanistan	93	111	Zaire	234	111	Bangladesh	218
112	Benin	93	112	Burundi	230	112	Burkina Faso	216
113	Somalia	93	113	Rwanda	225	113	Burundi	207
114	Chad	89	114	Afghanistan	219	114	Malawi	195
115	Indonesia	79	115	Sudan	209	115	Somalia	173
116	Nepal	75	116	Chad	205	116	Uganda	173
117	Haiti	73	117	Malawi	201	117	Chad	165
118	Malawi	71	118	Mozambique	199	118	Nepal	164
119	Burundi	70	119	Burkina Faso	185	119	Nigeria	157
120	Lesotho	66	120	Bangladesh	179	120	Madagascar	139
121	Mali	63	121	Myanmar	165	121	Tanzania	107
122	Rwanda	58	122	Nepal	131	122	Zaire	102
123	Burkina Faso	54	123	Uganda	124	123	Mozambique	84

APPENDIX Q - Gross National Product Per Capita (GNP/C, $US) Growth Rates All Countries (Alphabetical Order)

Country	GNP/C 1965/ 1980	GNP/C 1980/ 1992	GNP/C 1965/ 1990	Country	GNP/C 1965/ 1980	GNP/C 1980/ 1992	GNP/C 1965/ 1990	Country	GNP/C 1965/ 1980	GNP/C 1980/ 1992	GNP/C 1965/ 1990
Afghanistan	0.6	N/A	N/A	Indonesia	5.2	4.0	4.5	Spain	4.1	2.9	2.4
Albania	N/A	-3.2	N/A	Iran	2.9	-1.4	0.1	Sri Lanka	2.8	2.6	2.9
Algeria	4.2	-0.5	2.1	Iraq	0.6	N/A	N/A	Sudan	0.8	-0.2	0.0
Angola	0.6	-0.9	N/A	Ireland	2.8	3.4	3.0	Sweden	2.0	1.5	1.9
Argentina	1.7	-0.9	-0.3	Israel	3.7	1.9	2.6	Switzerland	1.5	1.4	1.4
Australia	2.2	1.6	1.9	Italy	3.2	2.2	3.0	Syria	5.1	-1.4	2.9
Austria	4.0	2.0	2.9	Ivory Coast	2.8	-4.7	0.5	Tanzania	0.8	0.0	-0.2
Bangladesh	-0.3	1.8	0.7	Jamaica	-0.1	0.2	-1.3	Thailand	4.4	6.0	4.4
Barbados	3.5	1.0	N/A	Japan	5.1	3.6	4.1	Togo	1.7	-1.8	-0.1
Belgium	3.6	2.0	2.6	Jordan	5.8	-5.4	N/A	Trinid & T.	3.1	-2.6	0.0
Benin	-0.3	-0.7	-0.1	Kenya	3.1	0.2	1.9	Tunisia	4.7	1.3	3.2
Bolivia	1.7	-1.5	-0.7	Korea, S.	7.3	8.5	7.1	Turkey	3.6	2.9	2.6
Botswana	9.9	6.1	8.4	Kuwait	0.6	-4.3	-4.0	UAE	0.6	-4.3	N/A
Brazil	6.3	0.4	3.3	Lesotho	6.8	-0.5	4.9	Uganda	-2.2	2.0	-2.4
Bulgaria	N/A	1.2	N/A	Liberia	0.5	N/A	N/A	UK	2.0	2.4	2.0
Burkina Faso	1.7	1.0	1.3	Libya	0.6	N/A	-3.0	Uruguay	2.5	-1.0	0.8
Burundi	2.4	1.3	3.4	Luxembourg	3.9	3.3	N/A	USA	1.8	1.7	1.7
Cameroon	2.4	-1.5	3.0	Madagascar	-0.4	-2.4	-1.9	USSR	N/A	1.0	N/A
Canada	3.3	1.8	2.7	Malawi	3.2	-0.1	0.9	Venezuela	2.3	-0.8	-1.0
Cen. Afr. Rep.	0.8	-1.5	-0.5	Malaysia	4.7	3.2	4.0	Yugoslavia	N/A	N/A	2.9
Chad	-1.9	3.4	-1.1	Mali	2.1	-2.7	1.7	Zaire	-1.3	-1.8	-2.2
Chile	-0.1	3.7	0.4	Malta	8.7	3.8	N/A	Zambia	-1.2	2.2	-1.9
China	4.1	7.6	5.8	Mauritius	3.7	5.6	3.2	Zimbabwe	1.7	-0.9	0.7
Colombia	3.7	1.4	2.3	Mexico	3.6	-0.2	2.8				
Congo	2.7	-0.8	3.1	Morocco	2.7	1.4	2.3				
Costa Rica	3.3	0.8	1.4	Mozambique	0.6	-3.6	N/A				
Cuba	0.6	N/A	N/A	Myanmar	1.6	N/A	N/A				
Cyprus	5.5	5.0	N/A	Nepal	0.1	2.0	0.5				
Czech.	N/A	0.5	N/A	Netherlands	2.7	1.7	1.8				
Denmark	2.2	2.1	2.1	New Zealand	1.7	0.6	1.1				
Domin. Rep.	3.8	-0.5	2.3	Nicaragua	-0.7	-5.3	-3.3				
Ecuador	5.4	-0.3	2.8	Niger	-2.5	-4.3	-2.4				
Egypt	2.8	1.8	4.1	Nigeria	4.2	-0.4	0.1				
El Salvador	1.5	0.0	-0.4	Norway	3.6	2.2	3.4				
Finland	3.6	2.0	3.2	Pakistan	1.8	3.1	2.5				
France	3.7	1.7	2.4	Panama	2.8	-1.2	1.4				
Gabon	5.6	-3.7	0.9	Papua NG.	0.6	0.0	0.1				
Gambia	2.3	-0.4	N/A	Paraguay	4.1	-0.7	4.6				
GDR	N/A	N/A	N/A	Peru	0.8	-2.8	-0.2				
Germany, W.	3.0	2.4	2.4	Philippines	3.2	-1.0	1.3				
Ghana	-0.8	-0.1	-1.4	Poland	1.5	0.1	N/A				
Greece	4.8	1.0	2.8	Portugal	4.6	3.1	3.0				
Guatemala	3.0	-1.5	0.7	Romania	N/A	-1.1	N/A				
Guinea	1.3	1.3	N/A	Rwanda	1.6	-0.6	1.0				
Haiti	0.9	-2.4	0.2	Saudi Arabia	0.6	-3.3	2.6				
Honduras	1.1	-0.3	0.5	Senegal	-0.5	0.1	-0.6				
Hong Kong	6.2	5.5	6.2	Sierra Leone	0.7	-1.4	0.0				
Hungary	5.1	0.2	5.1	Singapore	8.3	5.3	6.5				
Iceland	2.6	1.5	N/A	Somalia	-0.1	-2.3	-0.1				
India	1.5	3.1	1.9	South Africa	3.2	0.1	1.3				

APPENDIX R - Post-1990 Data (PRI, HDI and GDP)*
All Countries (Alphabetical Order)

Country	PRI 1989/ 1991	PRI 1998	PRI 1990/ 1998 Avg.	HDI 1997	HDI Shortf Red. Rate (%) 1990-97	GDP Growth Rate (%) 1990-98
Albania	7.0	4.0	5.5	0.699	-0.9	1.8
Algeria	5.3	6.0	5.7	0.665	7.5	1.2
Argentina	1.3	3.0	2.2	0.827	12.1	5.3
Australia	1.0	1.0	1.0	0.922	35.0	3.6
Austria	1.0	1.0	1.0	0.904	16.5	2.0
Bangladesh	4.3	2.0	3.2	0.440	6.8	4.8
Benin	6.7	2.0	4.4	0.421	7.2	4.6
Bolivia	2.0	1.0	1.5	0.652	10.6	4.2
Botswana	1.3	2.0	1.7	0.609	-18.5	4.8
Brazil	2.0	3.0	2.5	0.739	10.7	3.3
Bulgaria	5.7	2.0	3.9	0.758	-8.5	-3.3
Burkina Faso	6.3	5.0	5.7	0.304	2.1	3.5
Burundi	7.0	7.0	7.0	0.341	-3.0	-3.2
Cameroon	6.0	7.0	6.5	0.536	0.6	0.6
Canada	1.0	1.0	1.0	0.932	10.4	2.2
Cen. Afr. Rep.	6.0	3.0	4.5	0.378	-1.0	1.5
Chad	6.7	6.0	6.4	0.393	4.4	4.6
China	6.7	7.0	6.9	0.701	20.7	11.1
Congo	6.7	7.0	6.9	0.533	0.3	1.0
Costa Rica	1.0	1.0	1.0	0.801	8.2	3.7
Denmark	1.0	1.0	1.0	0.905	17.0	2.8
Dominican Rep.	1.3	2.0	1.7	0.726	10.7	5.5
Ecuador	2.0	2.0	2.0	0.747	7.6	2.9
Egypt	5.0	6.0	5.5	0.616	10.2	4.2
Finland	1.0	1.0	1.0	0.913	18.1	2.0
France	1.0	1.0	1.0	0.918	20.5	1.5
Ghana	6.0	3.0	4.5	0.544	7.9	4.2
Greece	1.3	1.0	1.2	0.867	13.6	2.0
Guatemala	3.0	3.0	3.0	0.624	8.8	4.2
Guinea	6.7	6.0	6.4	0.398	7.0	5.0
Honduras	2.0	2.0	2.0	0.641	6.4	3.6
Hong Kong	4.0	4.0	4.0	0.888	15.2	4.4
Indonesia	5.3	6.0	5.7	0.681	13.8	5.8
Ireland	1.0	1.0	1.0	0.900	27.0	7.5
Italy	1.0	1.0	1.0	0.900	20.0	1.2
Ivory Coast	6.0	6.0	6.0	0.422	1.0	3.5
Japan	1.0	1.0	1.0	0.924	19.5	1.3
Kenya	6.0	6.0	6.0	0.519	-5.4	2.2
Korea, S.	2.0	2.0	2.0	0.852	24.6	6.2
Lesotho	6.0	4.0	5.0	0.582	2.9	7.2
Malawi	6.7	2.0	4.4	0.399	5.1	3.9
Malaysia	4.7	5.0	4.9	0.768	17.7	7.7

Appendix R (cont'd)

Country	PRI 1989/ 1991	PRI 1998	PRI 1990/ 1998 Avg.	HDI 1997	HDI Shortf Red. Rate (%) 1990-97	GDP Growth Rate (%) 1990-98
Mali	6.0	3.0	4.5	0.375	8.3	3.7
Morocco	4.0	5.0	4.5	0.582	9.2	2.1
Mozambique	6.0	3.0	4.5	0.341	1.1	5.7
Nepal	3.7	3.0	3.3	0.463	8.8	4.8
Netherlands	1.0	1.0	1.0	0.921	23.7	2.6
New Zealand	1.0	1.0	1.0	0.901	22.7	3.2
Niger	6.7	7.0	6.9	0.298	2.1	1.9
Nigeria	5.3	6.0	5.7	0.456	6.3	2.6
Norway	1.0	1.0	1.0	0.927	33.1	3.9
Pakistan	3.3	4.0	3.7	0.508	9.6	4.1
Paraguay	4.7	4.0	4.4	0.730	8.0	2.8
Peru	2.3	5.0	3.7	0.739	12.2	5.9
Philippines	2.3	2.0	2.2	0.740	10.1	3.3
Poland	3.7	1.0	2.3	0.802	10.0	4.5
Portugal	1.0	1.0	1.0	0.858	23.3	2.3
Romania	6.7	2.0	4.4	0.752	2.8	-0.6
Rwanda	6.0	7.0	6.5	0.379	8.5	-3.3
Saudi Arabia	6.7	7.0	6.9	0.740	11.1	1.6
Senegal	3.7	4.0	3.8	0.426	5.6	3.0
Singapore	4.0	5.0	4.5	0.888	32.5	8.0
South Africa	5.3	1.0	3.2	0.695	-1.8	1.6
Spain	1.0	1.0	1.0	0.894	18.5	1.9
Sri Lanka	3.7	3.0	3.3	0.721	8.9	5.3
Sweden	1.0	1.0	1.0	0.923	7.1	1.2
Thailand	2.3	2.0	2.2	0.753	12.9	7.4
Togo	6.0	6.0	6.0	0.469	2.4	2.3
Tunisia	5.3	6.0	5.7	0.695	15.2	4.4
Uganda	5.7	4.0	4.9	0.404	6.4	7.4
UK	1.0	1.0	1.0	0.918	33.5	2.2
Uruguay	1.3	1.0	1.2	0.826	11.7	3.9
USA	1.0	1.0	1.0	0.927	17.9	2.9
USSR/Russia	5.7	4.0	4.9	0.757	-18.5	-7.0
Venezuela	1.0	2.0	1.5	0.792	5.2	2.0
Zambia	6.0	5.0	5.5	0.431	-5.4	1.0
Zimbabwe	6.0	5.0	5.5	0.560	-12.6	2.0

Notes. The sources for the data are given in Chapter 8 (section 8.2). PRI means Political Rights Index (Gastil).

General Bibliography [1]

Adelman, I. and Morris, C.T. (1967), *Society, Politics and Economic Development: A Quantitative Approach.* Baltimore: Johns Hopkins Press.

Agpalo, R.E. (1992), "Modernization, Development and Civilization" in Bauzon, K. (ed.), *Development and Democratization in the Third World: Myths, Hopes and Realities.* Washington: Crane Russell.

Alatas, Syed Farid. (1997), *Democracy and Authoritarianism in Indonesia and Malaysia.* London: Macmillan.

Alker, H.R. Jr and Russett, B.M. (1966), *Indices For Comparing Inequality* in Merritt, R.L and Rokkan, S. (eds.), *Comparing Nations: The Use of Quantitative Data in Cross-National Research.* New Haven, CT: Yale University Press.

Allen, Martin G. (1962), "The Development of Universal Criteria for Measuring the Health of a Society", *Journal of Social Psychology*, 57, 363-382.

Almond, G.A. (1965), "A Developmental Approach to Political Systems", *World Politics* (January), Vol. 17, No. 2.

----- (1987), "The Development of Political Development" in Weiner, M. and Huntington, S.(eds.), *Understanding Political Development.* Boston: Little, Brown.

Almond, G.A. and Bingham Powell, G.B. (1966), *Comparative Politics: A Developmental Approach.* Boston: Little, Brown.

Almond, G.A. and Verba, S. (1989), *The Civic Culture: Political Attitudes and Democracy in Five Nations.* London: Sage.

Andrain, Charles F. (1994), *Comparative Political Systems: Policy Performance and Social Change.* London: M.E. Sharpe.

Andrews, Frank M. (1980), "Comparative Studies of Life Quality: Comments on the Current State of the Art and Some Issues for Future Research" in Szalai, A. et al (eds.), *The Quality of Life.* London: SAGE.

----- (1986) (ed.), *Research on the Quality of Life.* Ann Arbor, MI: Institute for Social Research.

Andrews, Frank M. and Inglehart, Ronald F. (1979), "The Structure of Subjective Well-Being in Nine Western Societies", *Social Indicators Research*, 6, 73-90.

Apter, David E. (1971), *Choice and the Politics of Allocation: A Developmental Theory.* New Haven: Yale University Press.

[1] The General Bibliography consists of the sources consulted primarily with respect to the body of the written text. All sources pertaining to the data gathered for the empirical analysis are found in the separate Statistical Bibliography. Some sources may appear in both Bibliographies.

Austin, G. (1992) "Scale Bias and State Building: An Historical Perspective on Government Intervention, Political Systems and Economic Performance in Tropical Africa". London: London School of Economics.

Bagchi, Amiya Kumar. (1995), "Democracy and Development: Heritage, Aspirations and Reality" in Bagchi (ed.), *Democracy and Development.* London: MacMillan.

Balefi, Tsie. (1995), *The Political Economy of Botswana in SADCC.* Harare: SAPES.

Banks, Arthur et al (eds.). (1996), *Political Handbook of the World: 1995-96.* London: Catermill Publishing.

Barkey, Henri J. (1992), "Introduction: Economic Reform in the Middle East" in Barkey, H.J. (ed.), *The Politics of Economic Reform in the Middle East.* New York: St. Martin's Press.

Barry, B. and Rae, D.W. (1975), "Political Evaluation" in Greenstein, F.I. and Polsby, N.W. (eds.), *Political Science: Scope and Theory.* Reading MA: Addison-Wesley.

Barsh, Russel L. (1992), "Democracy and Development", *Human Rights Quarterly 14,* 120-134.

Baster, Nancy. (1972), "Development Indicators: An Introduction", *Journal of Development Studies 8,* 2-20.

Bauzon, Kenneth. (1992a), "Democracy: Myth or Reality" in Bauzon, K. (ed.), *Development and Democratization in the Third World: Myths, Hopes and Realities.* Washington: Crane Russell.

----- (1992b), "Development Studies: Contending Approaches and Research Trends" in Bauzon, K. (ed.), *Development and Democratization in the Third World: Myths, Hopes and Realities.* Washington: Crane Russell.

Bay, Christian. (1965),"Politics and Pseudopolitics: A Critical Evaluation of Some Behavioral Literature", *American Political Science Review,* 59, 39-51.

----- (1968), "Needs, Wants and Political Legitimacy", *Canadian Journal of Political Science,* Vol. 1, 241-260.

----- (1970), *The Structure of Freedom.* Stanford: Stanford University Press.

----- (1971a), "Human Development and Political Orientations: Notes Toward A Science of Political Education" in Abcarian, G. and Soule, J.W. (eds.), *Social Psychology and Political Behavior: Problems and Prospects.* Columbus OH: Charles E. Merrill.

----- (1971b), "Foundations of the Liberal Make-Believe: Some Implications of Contract Theory Versus Freedom Theory", *Inquiry,* Vol. 14, No. 3, 213-243.

----- (1977), "Human Needs and Political Education" in Fitzgerald, R. (ed.), *Human Needs and Politics.* Oxford: Pergamon.

----- (1990), "Taking the Universality of Human Needs Seriously" in Burton, John (ed.), *Conflict: Human Needs Theory*. London: Macmillan.

Bellin, Eva. (1991), "Tunisian Industrialists and the State" in Zartman, W.I. (ed.), *Tunisia: The Political Economy of Reform*. Boulder, Co: Lynne Rienner.

Berg-Schlosser, Dirk. (1984), "African Political Systems: Typology and Performance", *Comparative Political Studies*, Vol. 17 No. 1, 121-151

Bhagwati, J.N. (1995), *Democracy and Development: New Thinking on an Old Question.* New York: Columbia University.

Bhardwaj, R.C. and Vijayakrishnan, K. (1998), *Democracy and Development: Allies or Adversaries?* Aldershot, UK: Ashgate Publishing.

Blondel, Jean. (1995), *Comparative Government: An Introduction (2nd Ed.).* London: Prentice Hall.

Bollen, Kennth A. (1980), "Issues in the Comparative Measurement of Political Democracy", *American Sociological Review*, Vol. 45, June, 370-390.

----- (1986), "Political Rights and Liberties in Nations: An Evaluation of Human Rights Measures, 1950-1984", *Human Rights Quarterly*, Vol. 8, No. 4, 567-591.

----- (1990), "Political Democracy: Conceptual and Measurement Traps", *Studies in Comparative International Development*, 7-23.

Bollen, K. A. and Jackman, R. (1985), "Political Democracy and the Size of Distribution of Income", *American Sociological Review*, 50 (August), 438-457.

Bossert, Thomas. (1983), "Can We Return to the Regime for Comparative Policy Analaysis?", *Comparative Politics*, Vol. 15, No. 4, 419-441.

Bowman, Larry W. (1991), *Mauritius: Democracy and Development in the Indian Ocean.* Boulder, Co: Westview Press.

Brumberg, Daniel. (1992), "Survival Strategies vs. Democratic Bargains: The Politics of Economic Reform in Contemporary Egypt" in Barkey, H.J. (ed.), *The Politics of Economic Reform in the Middle East.* New York: St. Martin's Press.

Brunetti, Aymo and Weder, Beatrice. (1995), "Political Sources of Growth: A Critical Note on Measurment", *Public Choice*, Vol. 82, Nos. 1-2, 125-134.

Cammack, Paul. (1994a),"Political Development and the Dissemination of Democracy", Democratization, Vol. 1, No. 3, 353-374.

----- (1994b), "Democratization and Citizenship in Latin America" in Parry, Geraint and Moran, M. (eds.) *Democracy and Democratization.* London: Routledge.

----- (1997), *Capitalism and Development in the Third World.* London: Leicester University Press.

Cantril, H. (1961), *Human Nature and Political Systems.* New Brunswick, NJ: Rutgers University Press.

----- (1965), *The Pattern of Human Concerns.* New Brunswick, NJ: Rutgers University Press.

----- (1967), *The Human Dimension: Experiences in Policy Research.* New Brunswick, NJ: Rutgers University Press.

Carley, Michael J. (1981), *Social Measurement and Social Indicators.* London: George Allen & Unwin Ltd.

----- (1983) "Social Indicators Research" in Finsterbusch, K. et al, *Social Impact Assessment Methods.* Beverly Hills: Sage.

Chenery, Hollis and Syrquin, Moshe. (1989), *Patterns of Development, 1950-83.* Washington: World Bank.

Cho, Hee-Yeon and Kim, Eun Mee. (1998) "State Autonomy and its Social Conditions for Economic Development in South Korea and Taiwan" in Kim, Eun Mee (ed.) *Four Asian Tigers: Economic Development and the Global Political Economy.* San Diego: Academic Press.

Colclough, C. and McCarthy, S. (1980), *The Political Economy of Botswana.* Oxford: OUP.

Corning, P.A. (1977), "Human Nature Redivivus" in Pennock, J.R. and Chapman, J.W. (eds.), *Human Nature in Politics.* New York: NYU Press.

Crosswell, M.J. (1981), "Basic Human Needs: A Development Planning Approach" in Leipziger, D.M. (ed.), *Basic Needs and Development.* Cambridge, MA: OG&H.

Cutler, Peter. (1984), "The Measurement of Poverty: A Review of Attempts to Quantify the Poor, with Special Reference to India", *World Development*, Vol. 12, Nos. 11/12, 1119-1130.

Cutright, Phillips. (1963), "National Political Development: Measurement and Analysis", *American Sociological Review*, 28, 253-264.

Cutright, P. and Wiley, J.A. (1969), "Modernization and Political Representation: 1927-1966", *Studies In Comparative International Development*, Vol. 5, 23-35.

Dasgupta, Partha and Weale, Martin. (1992), "On Measuring the Quality of Life", *World Development*, Vol. 20, No. 1, 119-131.

Davies, James C. (1959), "A Note on Political Motivation", *Western Political Quarterly*, 12, 410-416.

----- (1962), "Toward a Theory of Revolution", *American Sociological Review*, Vol. 27, No. 1, 5-19.

----- (1963), *Human Nature in Politics*. London: Wiley.

----- (1977a), "Human Needs and Stages of Political Development" in Pennock, J.R. and Chapman, J.W. (eds.), *Human Nature in Politics*. New York: NYU Press.

----- (1977b), "The Development of Individuals and the Development of Polities" in Fitzgerald, R. (ed.), *Human Needs and Politics*. Oxford: Pergamon.

Day, Alan J. (1988), *Political Parties of the World (3rd ed.)*. Harlow: Longman.

Delury, George E. (ed.) (1983), *World Encyclopedia of Political Systems*. Harlow: Longman.

Derbyshire, J.D. and Derbyshire, Ian. (1989), *Political Systems of the World*. Edinburgh: W & R Chambers.

Desai, Meghnad. (1990), *Poverty and Capability: Towards an Empirically Implementable Measure*, Working Paper (Third Draft).

----- (1991),"Human Development: Concepts and Measurement", *European Economic Review*, 35, 350-7.

----- (1994), *Measuring Political Freedom*, Discussion Paper 10, The Center for the Study of Global Governance (London School of Economics).

Deutsch, Karl W. (1961), "Social Mobilization and Political Development", *American Political Science Review*, Vol. LV, No. 3, 493-513.

Diamond, Larry. (1992), "Economic Development and Democracy Reconsidered", *American Behavioral Scientist*, Vol. 35, No 4/5, 450-499.

Diamond, Larry et al (eds.) (1988), *Democracy in Developing Countries, Vol. 2: Africa*. Boulder, Co: Lynne Reinner.

----- (1989), *Democracy in Developing Countries, Vol. 3: Asia*. Boulder, Co: Lynne Reinner.

Doessel, D.P. and Gounder, Rukmani. (1994), "Theory and Measurement of Living Levels: Some Empirical Results for the Human Development Index", *Journal of International Development*, Vol. 6, No. 4, 415-435.

Dogan, Mattei and Pelassy, Dominique. (1990), *How To Compare Nations: Strategies In Comparative Politics*. Chatham, NJ: Chatham House Publishers.

Doyal, Len and Gough, Ian. (1984), "A Theory of Human Needs", *Critical Social Policy*, No. 10, 6-38.

Drewnowski, Jan. (1970), *Studies in the Measurement of Levels of Living and Welfare.* Geneva: UNRISD Report No. 70.3.

----- (1972), "Social Indicators and Welfare Measurement: Remarks on Methodology" in *Journal of Development Studies,* 8, 77-90.

Dreze, J. and Sen, A. (1990), *Hunger and Public Action.* Oxford: Clarendon Press.

Eckstein, Harry. (1971), *The Evaluation of Political Performance: Problems and Dimensions.* London: Sage.

Edwards, J.(1994), "Democratization and Qualified Explanation" in Parry, Geraint and Moran, M. (eds.) *Democracy and Democratization.* London: Routledge.

Elazar, Daniel J. (1991), *Federal Systems of the World: A Handbook of Federal, Confederal and Autonomy Arrangements.* Harlow: Longman.

Emmerij, Louis and Ghai, Dharam. (1977), *Meeting Basic Needs: Strategies for Eradicating Mass Poverty and Unemployment.* Geneva: ILO.

Erikson, Robert. (1993), "Descriptions of Inequality: The Swedish Approach to Welfare Research" in Nussbaum, M.C. and Sen, A. (eds.), *The Quality of Life.* Oxford: OUP.

Estes, Richard J. (1988), *Trends In World Social Development: The Social Progress of Nations, 1970-89.* London: Praeger.

Etzioni, Amitai. (1968), "Basic Human Needs, Alienation and Inauthenticity", *American Sociological Review,* Vol. 33, No. 6, 870-885.

Finsterbusch, K. et al (eds.) (1983), *Social Impact Assessment Methods.* London: SAGE.

Fisk, E.K and Osman-Rani, H. (eds.) (1982), *The Political Economy of Malaysia.* Oxford: OUP.

Fitzgerald, Ross. (1977a) "Introduction" in Fitzgerald (ed.), *Human Needs and Politics.* Oxford: Pergamon.

----- (1977b) "Abraham Maslow's Hierarchy of Needs: An Exposition and Evaluation" in Fitzgerald, R. (ed.), *Human Needs and Politics.* Oxford: Pergamon.

Fitzgibbon, Russell H. (1956), "A Statistical Evaluation of Latin American Democracy", *World Political Quarterly,* IX, 607-619.

Flew, Antony G.N. (1977), "Wants or Needs, Choices or Commands" in Fitzgerald, R. (ed.), *Human Needs and Politics.* Oxford: Pergamon.

Gallup, George H. (1976),"Human Needs and Satisfactions: A Global Survey", *Public Opinion Quarterly,* 40, 459-467.

Gastil, Raymond D. (1982), "Toward an Index of Democratic Development" in Gastil, R. *Freedom in the World: Political Rights and Civil Liberties 1982.* New York: Freedom House.

----- (1990b), "The Comparative Survey of Freedom: Experiences and Suggestions", *Studies In Comparative International Development*, Vol. 5, No. 1, 25-50.

Galtung, J. (1994), *Human Rights In Another Key.* Oxford: Polity Press.

Gendzier, Irene R. (1985), *Managing Political Change: Social Scientists in the Third World.* Boulder, CO: Westview Press.

Ghai, D.P. and Alfthan, T. (1977), "On the Principles of Quantifying and Satisfying Basic Needs" in D.P. Ghai et al (eds.), *The Basic Needs Approach to Development.* Geneva: ILO.

Girling, John L.S. (1996), *The Bureaucratic Polity in Modernizing Societies: Similarities, Differences and Prospects in the ASEAN region.* Singapore: Institute of Southeast Asian Studies.

Goulet, Denis. (1968), "Development For What?", *Comparative Political Studies*, Vol. 1, No. 2, 295-312.

----- (1971), *The Cruel Choice: A New Concept in the Theory of Development.* New York: Atheneum.

----- (1995), *Development Ethics: A Guide to Theory and Practice.* New York: The Apex Press.

Graham, William K. and Balloun, Joe. (1973), "An Empirical Test of Maslow's Need Hierarchy Theory", *Journal of Humanistic Psychology*, Vol. 13, No. 1, 97-107.

Granberg, P. and Parkinson, J.R. (eds.) (1988), *Botswana: Country Case Study and Norwegian Aid Review.* Bergen: DERAP.

Griffin, K. and Knight, J. (eds.). (1990), *Human Development and the International Development Strategy for the 1990s.* London: Macmillan.

Griffin, K. and McKinley, T. (1993), *Towards a Human Development Strategy.* New York: Human Development Report Office.

Grissa, Abdelsatar. (1991), "The Tunisian State Enterprises and Privatization Policy", in Zartman, W.I. (ed.), Tunisia: The Political Economy of Reform. Boulder, Co.: Lynne Rienner.

Gurr, T.R. (1970), *Why Men Rebel.* Princeton, NJ: Princeton University Press.

Gurr, T.R. et al. (1990), "The Transformation of the Western State: The Growth of Democracy, Autocracy, and State Power Since 1800", *Studies in Comparative International Development*, Vol. 25, No. 1, 73-108.

Hadenius, Axel. (1992), *Democracy and Development.* Cambridge: Cambridge University Press.

Haggard, Stephen and Kaufman, Robert R. (1995), *The Political Economy of Democratic Transitions.* Princeton, NJ: Princeton University Press.

Hankiss, Elemer. (1980), "Structural Variables in Cross-Cultural Research on the Quality of Life" in Szalai et al (eds.), *The Quality of Life.* London: SAGE.

Haq, M. (1992), *Human Development in a Changing World.* New York: Human Development Office (United Nations).

Hartland-Thunberg, Penelope. (1978), *Botswana: An African Growth Economy.* Boulder, Co: Westview Press.

Harvey, C. (ed.) (1981), *Papers on the Economy of Botswana.* London: Heinemann.

Harvey, C. and Lewis Jr., S.R. (1990), *Policy Choice and Development Performance in Botswana.* London: Macmillan.

Hastings, Philip K. (1956), "The Voter and the Non-Voter", *American Journal of Sociology*, 62, 302-307.

Hawkesworth, M. and Kogan, M. (eds.). (1992), *Encyclopedia of Government and Politics.* London: Routledge.

Haynes, Jeff. (1996), *Third World Politics: A Concise Introduction.* Oxford: Blackwell.

Heeger, Gerald A. (1974), *The Politics of Underdevelopment.* London: St. Martin's Press.

Herlemann, H. (1987), *Quality of Life in the Soviet Union.* Boulder, Co: Westview Press.

Herrera, A. et al.(1976), *Catastrophe or New Society? A Latin American World Model.* Ottawa: IDRC.

Heydemann, Steven. (1992), "The Political Logic of Economic Rationality: Selective Stabilization in Syria" in Barkey, H.J. (ed.), *The Politics of Economic Reform in the Middle East.* New York: St. Martin's Press.

Hicks, N. and Streeten, P. (1981), "The Search For A Basic Needs Yardstick", in Streeten, P. *Development Perspectives.* London: Macmillan.

Hopkins, Michael. (1991), "Human Development Revisited: A New UNDP Report", *World Development*, Vol. 19, No. 10, 1469-1473.

Hopkins, M. and Van der Hoeven, R. (1983), *Basic Needs In Development Planning.* Aldershot, UK: Gower.

Huat, Chua Beng. (1994), "Singapore" in Mahmood, Norma (ed.), *Rethinking Development in Southeast Asia.* Kuala Lumpur: University of Malaya Press.

Humana, C. (1983), *World Human Rights Guide*. London: Hutchinson.

----- (1992), *World Human Rights Guide (3rd Ed.)*. Oxford: OUP.

Huntington, S.P. (1965), "Political Development and Political Decay", *World Politics*, 17, No. 3, 386-430.

----- (1970), "Violence and Social and Economic Modernization" in Nordlinger, E.A. (ed.), *Politics and Society. Studies in Comparative Political Sociology*. Englewood Cliffs, NJ: Prentice Hall.

----- (1987), "The Goals of Development" in Weiner, M. and Huntington, S.P. (eds.), *Understanding Political Development*. Boston: Little, Brown.

----- (1991), *The Third Wave: Democratization in the Late Twentieth Century*. Norman: University of Oklahoma Press.

Huntington, S. P. and Nelson, J.P. (1976), *No Easy Choice: Political Participation in Development Countries*. Cambridge MA: Harvard.

Huque, A.S. et al. (eds.) (1996), *Public Administration in the NICs: Challenges and Accomplishments*. London: Macmillan.

ILO. (1976), *Employment, Growth and Basic Needs: A One World Problem*. Geneva: ILO.

Ingham, Barbara. (1993), "The Meaning of Development: Interactions Between 'New' and 'Old' Ideas", *World Development*, Vol. 21, No. 11, 1803-1821.

Inglehart, R. and Rabier, J.R. (1986), "Aspirations Adapt to Situations" in Andrews, F.M. (ed.), *Research on The Quality of Life*. Ann Arbor, MI: Institute for Social Research.

Inkeles, Alex. (1990), "Introduction: On Measuring Democracy", *Studies in Comparative International Development*, 3-6.

----- (1991) (ed.), *On Measuring Democracy: Its Consequences and Concomitants*. New Brunswick, NJ: Transaction Publishers.

Jackman, Robert W. (1973), "On the Relation of Economic Development to Political Performance", *American Journal of Political Science*, Vol. XV11, No. 3, 611- 621.

Jaguaribe, Helio (1973), *Political Development: A General Theory and Latin American Case Study*. New York: Harper and Row.

Janda, Kenneth. (1980), *Political Parties: A Cross-National Survey*. New York: Free Press.

Johnson, Chalmers. (1982), *MITI and the Japanese Miracle*. Stanford: Stanford University Press.

----- (1995), *Japan: Who Governs? The Rise of the Developmental State*. New York: WW Norton and Company.

Jones, W.H.M. (1954), "In Defense of Apathy: Some Doubts on the Duty to Vote", *Political Studies*, 11, 25-37.

Kamrava, Mehran. (1993), *Politics and Society in the Third World*. New York: Routledge.

----- (1996), *Understanding Comparative Politics: A Framework For Analysis*. London: Routledge.

Kaufman, Arnold S. (1971), "Wants, Needs and Liberalism", *Inquiry*, Vol. 14, No. 3, 191-206.

Kempe, Ronald Hope Sr. (1997), *African Political Economy*. London: M.E. Sharpe.

Kim, Eun Mee. (ed.) (1998), *The Four Asian Tigers: Economic Development and the Global Political Economy*. San Diego: Academic Press.

Kind, Paul. (1988), *The Design and Construction of Quality of Life Measures*. York: University of York.

King, Dwight Y. (1981), "Regime Type and Performance: Authoritarian Rule, Semi-Capitalist Development, and Rural Inequality in Asia", *Comparative Political Studies*, Vol. 13, No. 4, 477-504.

Knutson, J. (1972), *The Human Basis of the Polity: A Psychological Study of Man*. Chicago: Aldine-Atherton.

----- (1977) "Human Needs Constraining Political Activity" in Fitzgerald, R. (ed.), *Human Needs and Politics*. Oxford: Pergamon.

Kohli, Atul. (1986), "Democracy and Development" in J. P. Lewis and V. Kallab (eds.), *Development Strategies Reconsidered*. Washington: Overseas Development Council.

Kumar, K. (1989), *Indicators For Measuring Changes in Income, Food Availability and Consumption, and the Natural Resource Base*. Washington: A.I.D.

Kurian, G.T. (1982), *Encyclopedia of the Third World (Vol. 1)*. London: Mansell Publishing Ltd.

----- (1989), *World Encyclopedia of Police Forces and Penal Systems*. New York: Facts on File.

----- (1991), *The New Book of World Rankings (3rd Ed.)*. New York: Facts on File.

Laband, David L. (1984), "Is There A Relationship Between Economic Conditions and Political Structure?", *Public Choice*, 42, 25-37.

Lamb, Geoff. (1981), "Rapid Capitalist Development Models: A New Politics of Dependence?" in Seers, D. (ed.), *Dependency Theory*. London: Frances Pinter.

Lane, Jan-Erik et al (eds.). (1991), *Political Data Handbook: OECD Countries*. New York: OUP.

Lane, Jan-Erik and Ersson, Svante. (1990), "Comparative Politics: From Political Science to Comparative Public Policy" in Leftwich, Adrian (ed.), *New Directions in Political Science: An International Review of Achievements and Prospects*. Aldershot, Hants: Edward Elgar Publishing.

----- (1993), "The Political Trinity: Liberty, Equality, Fraternity" in Keman, Hans (ed.), *Comparative Politics: New Directions in Theory and Method*. Amsterdam: VU University Press.

----- (1994), *Comparative Politics: An Introduction and New Approach*. Cambridge: Polity Press.

----- (1996), "Democracy and Development: A Statistical Exploration" in Leftwich, A. (ed.), *Democracy and Development*. Oxford: Polity Press.

Lane, R. (1969), *Political Thinking and Consciousness*. Chicago: Markham Publishing.

Laothamatas, Anek (ed.) (1997), *Democratization in Southeast and East Asia*. Singapore: Institute of Southeast Asian Studies.

Larson, David A. and Wilford, Walton W. (1979), "The Physical Quality of Life Index: A Useful Social Indicator?", *World Development*, Vol. 7, 581-584.

Le Bon, Gustave. (1896), *The Crowd: A Study of the Popular Mind*. London: T.F. Unwin.

Lee, E.L.H. (1977), "Some Normative Aspects of a Basic Needs Strategy" in Ghai, D.P. et al (eds.), *The Basic-Needs Approach to Development*. Geneva: ILO.

Leipziger, D.M. (ed.). (1981), *Basic Needs and Development*. Cambridge, MA: OG&H.

Leftwich, Adrian. (1983), *Redefining Politics: People, Resources and Power*. London: Methuen.

----- (1990) (ed.), *New Directions in Political Science: An International Review of Achievements and Prospects*. Aldershot, Hants: Edward Elgar Publishing.

----- (1993a), "Governance, Democracy and Development in the Third World", *Third World Quarterly*, Vol. 14, No. 3, 605-624.

----- (1993b),"States of Underdevelopment: The Third World State in Theoretical perspective", *Journal of Theoretical Politics*, Vol. 6, No. 1, 55-74.

------ (1994), "Governance, The State and the Politics of Development", *Development and Change*, Vol. 25, 363-386.

----- (1995), "Bringing Politics Back In: Towards a Model of the Developmental State", *Journal of Development Studies*, Vol. 31, No. 3, 400-427.

----- (1996a), "On the Primacy of Politics" in Leftwich, A. (ed.), *Democracy and Development.* Oxford: Polity Press.

----- (1996b), "Two Cheers for Democracy? Democracy and the Developmental State" in Leftwich, A. (ed.), *Democracy and Development.* Oxford: Polity Press.

----- (1998), "Forms of the Democratic Developmental State: Democratic Practices and Development Capacity" in Robinson, Mark and White, G. (eds.). *The Democratic Developmental State.* New York: OUP.

Lewis, Charles, T. (1972), "Indicators of Political Development" in *Journal of Development Studies*, 8, 103-131.

Lewis, M.A. (1981), "Sectoral Aspects of a Basic Needs Approach" in Leipziger, D.M. (ed.), *Basic Needs and Development.* Cambridge, MA: OG&H.

Lind, N.C. (1993), "A Compound Index of National Development", *Social Indicators Research*, 28, 267-284.

Lindauer, David L. (1988), *The Size and Growth of Government Spending.* Washington: The World Bank.

Lipset, S.M. (1959), "Some Social Requisites of Democracy: Economic Development and Political Legitimacy", *American Political Science Review*, 53, 69-105.

----- (1970), "Political Cleavages in 'Developed' and 'Emerging' Polities" in Allardt, E. (ed.), *Mass Politics.* New York: The Free Press.

----- (1981), *Political Man.* Baltimore: Johns Hopkins Press.

----- (1994), "The Social Requisites of Democracy Revisited", *American Sociological Review*, Vol. 59, February, 1-22.

Liu, Yong-chuan. (1993), *Patterns and Results of The Third Democratization Wave.* Lanham, Md: University Press of America.

Macpherson, C.B. (1977), "Needs and Wants: an Ontological or Historical Problem?" in Fitzgerald, R. (ed.), *Human Needs and Politics.* Oxford: Pergamon.

Mahmood, Norma. (1994), *Rethinking Development in Southeast Asia.* Kuala Lumpur: University of Malaya Press.

Mannick, A.R. (1989), *Mauritius: The Politics of Change.* Mayfield: Dodo Books.

Maslow, Abraham. (1946), "A Theory of Human Motivation" in Harriman (ed.), *Twentieth Century Psychology.* New York: The Philosophical Library Inc.

----- (1970), *Motivation and Personality.* New York: Harper and Row.

Mayer, Lawrence C. (1989), *Redefining Comparative Politics: Promise Versus Performance.* Newbury Park, CA: Sage.

McGillivray, Mark. (1991), "The Human Development Index: Yet Another Redundant Composite Development Indicator?", *World Development*, Vol. 19, No. 10, 1466-1470.

McGillivray, Mark and White, Howard. (1993), "Measuring Development? The UNDP's Human Development Index" , *Journal of International Development*, Vol. 5, No. 2, 183-192.

McGranahan, Donald. (1972a), "Development Indicators and Development Models" in *Journal of Development Studies*, 8, 91-102.

----- (1972b)(ed.) *Contents and Measurement of Socioeconomic Development.* New York: Praeger.

McGranahan, D. et al. (1985), *Measurement and Analysis of Socio-Economic Development.* Geneva: UNRISD.

McInnes, Neil. (1977), "The Politics of Needs - or, Who Needs Politics?" in Fitzgerald, R. (ed.), *Human Needs and Politics.* Oxford: Pergamon.

McKinlay, R.D. and Cohan, A.S. (1975), "A Comparative Analysis of Political and Economic Performance of Military and Civilian Regimes: A Cross-National Aggregate Study", *Comparative Politics*, Vol. 8, No. 1, 1-30.

Merritt, R.L and Rokkan, S. (eds.) (1966) *Comparing Nations: The Use of Quantitative Data in Cross-National Research.* New Haven, CT: Yale University Press.

Meyer, William J. (1974), "Democracy: Needs Over Wants", *Political Theory*, Vol. 2, No. 2., 197-213.

Miles, Ian. (1985), *Social Indicators for Human Development.* London: Frances Pinter.

Mills, C. Wright. (1956), *The Power Elite.* London: OUP.

Monshipouri, Mahmood. (1995), *Democratization, Liberalization and Human Rights in the Third World.* London: Lynne Rienner.

Moon, Bruce. (1991), *The Political Economy of Basic Human Needs.* Ithaca, NY: Cornell University Press.

Moon, Bruce E. and Dixon, William J. (1985), "Politics, the State, and Basic Human Needs: A Cross-National Study", *American Journal of Political Science*, 29, 661-694.

Moore, Mick. (1995), "Democracy and Development in Cross-National Perspective: A New Look at the Statistics", *Democratization*, Vol. 2, No. 2, 1-19.

Morris, M.D. (1979), *Measuring The Condition of the World's Poor: The Physical Quality of Life Index.* New York: Pergamon.

Morrison, Barrie M. and Waxler, Nancy E. (1986), "Three Patterns of Basic Needs Distribution within Sri Lanka: 1971-73", *World Development*, Vol. 14, No. 1, 97-114.

Moskos Jr., Charles C. and Bell, Wendell. (1965), "Attitudes Towards Democracy Among Leaders in Four Emergent Nations", *Studies in Comparative International Development*, 1, 217-228.

Muller, Edward E. (1988), Democracy, Economic Development, and Income Inequality", *American Sociological Review*, Vol. 53, 50-68.

Munck, Ronaldo (1994), "Democracy and Development" in Sklair, L. (ed.), *Capitalism and Development.* London: Routledge.

Munro-Kua, Anne. (1996), *Authoritarian Populism in Malaysia.* London: Macmillan Press.

Munslow, Barry and Ekoko, F.E. (1995), "Is Democracy Necessary for Sustainable Development?", *Democratization*, Vol. 2, No. 2, 158-178.

Murray, Christopher. (1991), *Data Development Constraints and the Human Development Index.* Geneva: UNRISD.

Nagel, Stuart S. (ed.) (1994), *Asian Development and Public Policy.* New York: St Martin's Press.

Needler, Martin C. (1991), *The Concepts of Comparative Politics.* New York: Praeger.

Neubauer, Deane E. (1967), "Some Conditions of Democracy", *American Political Science Review*, Vol. LXI, No. 4, 1002-1009.

Nordlinger, E.A. (1970), "Political Development: Time Sequences and Rates of Change" Nordlinger, E.A. (ed.), *Politics and Society. Studies in Comparative Political Sociology.* Englewood Cliffs, NJ: Prentice Hall.

----- (1987), "Taking the State Seriously" in Weiner, M. and Huntington, S.P. (eds.), *Understanding Political Development.* Boston: Little, Brown.

Nteta, Doreen and Hermans, Janet (eds.). (1997), *Sustainable Rural Development.* Gabarone: The Botswana Society.

O'Brian-Place, P. and Frankenberger, T.R. (1989), *Food Availability and Consumption Indicators.* Washington: USAID.

O'Donnell, G. and Schmitter, P.C. (1986), *Transitions From Authoritarian Rule: Tentative Conclusions About Uncertain Democracies.* Baltimore: Johns Hopkins.

O'Donnell, T. et al. (1991), *World Quality of Life Indicators.* Santa Barbera, Ca: ABC-CLIO.

Ogwang, Tomson. (1994),"The Choice of Principle Variable for Computing the Human Development Index", *World Development*, Vol. 22, No. 12, 2011-2014.

Olson, Mancur. (1993), "Dictatorship, Democracy and Development", *American Political Science Review*, Vol. 87, No. 3, 567-575.

Onis, Ziya. (1991), "The Logic of the Developmental State", *Comparative Politics*, Vol. 24, No. 1, 109-126.

Park, Han S. (1984), *Human Needs and Political Development.* Cambridge, MA: Schenkman Publishing.

Parry, Geraint and Moran, M. (1994), "Introduction: Problems of Democracy and Democratization" in Parry, Geraint and Moran, M. (eds.) *Democracy and Democratization.* London: Routledge.

Parson, Jack. (1984), *Botswana: Liberal Democracy and the Labor Reserve in Southern Africa.* Boulder, Co: Westview.

----- (1990) (ed.) *Succession To High Office In Botswana.* Athens,Oh: Ohio University Press.

Pennock, J. Roland. (1966), "Political Development, Political Systems, and Political Goods", *World Politics*, 18, 415-434.

Pennock, J.R. and Chapman, J.W. (eds.). (1977), *Human Nature In Politics.* New York: NYU.

Pereira, Luiz Bresser. (1984), *Development and Crisis in Brazil, 1930-83.* Boulder, Co: Westview Press.

Perez-Lopez, J.F. *Measuring Cuban Economic Performance.* Austin, TX: University of Texas Press.

Perthes, Volker. (1995), *The Political Economy of Syria Under Assad.* London: I.B. Taurus.

Picard, Louis A. (1987), *The Politics of Development in Botswana: A Model for Success?* Boulder, Co: Lynne Rienner.

Pluta, Joseph. (1979), "The Performance of South American Civilian and Military Governments from a Socio-Economic Perspective", *Development and Change*, Vol. 10, 461-83.

Pollis, Adamantia. (1992), "Human Rights" in Hawkesworth, M. and Kogan, M. (eds.), *Encyclopedia of Government and Politics.* London: Routledge.

Pourgerami, Abbas. (1988), "The Political Economy of Development: A Cross-National Causality Test of Development-Democracy-Growth Hypothesis", *Public Choice*, 58, 123-141.

----- (1991), *Democracy and Development in the Third World.* Boulder, Co: Westview Press.

----- (1992), "Authoritarian Versus Non-Authoritarian Approaches to Economic Development: Update and Additional Evidence", *Public Choice*, Vol. 74, No. 3, 365-377.

Przeworski, Adam and Limongi, Fernando. (1995), "Political Regimes and Economic Growth" in A.K Bagchi (ed.), *Democracy and Development.* London: MacMillan.

Pye, Lucien. (1965a), "The Concept of Political Development", *Annals of the American Academy of Politics and Social Science*, 358, 1-19.

----- (1965b), "Introduction: Political Culture and Political Development" in Pye and Verba (eds.), *Political Culture and Political Development.* Princeton: Princeton Univ. Press.

----- (1966), *Aspects of Political Development.* Boston: Little, Brown.

----- (1968),"Political Systems and Political Development" in Rokkan, S. (ed.), *Comparative Research Across Cultures and Nations.* Paris: Mouton.

Quah, J.S. (1994), "Political Consequences of Rapid Economic Development: The Singapore Case" in Nagel, Stuart S. (ed.), *Asian Development and Public Policy.* New York: St Martin's Press.

Ram, Rati. (1982a), "International Inequality in the Basic Needs Indicators", *Journal of Development Economics*, 10, 113-117.

-----(1982b), "Composite Indices of Quality of Life, Basic Needs Fulfillment, and Income", *Journal of Development Economics*, 11, 227-247.

Rao, Vaman. (1984), "Democracy and Economic Development", *Studies in Comparative International Development*, Vol. XIX, No. 4, 67-81.

Rao, V.V. Bhanoji. (1991), "Human Development Report 1990: Review and Assessment" in *World Development*, Vol. 19, No. 10, 1451-1460.

Renshon, Stanley A. (1977), "Human Needs and Political Analysis: An Examination of a Framework" in Fitzgerald, R. (ed.), *Human Needs and Politics.* Oxford: Pergamon.

Robinson, Mark and White G. (1998), "Introduction" in Robinson, Mark and White, G. (eds.). *The Democratic Developmental State.* New York: OUP.

Rodan, Garry. (1989), *The Political Economy of Singapore's Industrialization: Nation State and International Capital.* London: Macmillan.

Roemer, J. (1995), "On the Relationship Between Economic Development and Political Democracy" in Bagchi (ed.), *Democracy and Development.* London: MacMillan.

Rosenberg, Morris. (1954), "Some Determinants of Apathy", *Public Opinion Quarterly*, XVIII, 349-366.

Rudebeck, L. (ed.) (1992), *When Democracy Makes Sense: Studies in the Democratic Potential of Third World Popular Movements.* Uppsala, Sweden: AKUT.

Rueschemeyer, Dietrich et al. (1991), *Capitalist Development and Democracy.* Cambridge: Polity Press.

Scoble, Harry M. and Wiseberg, Laurie, S. (1981), "Problems of Comparative Research on Human Rights" in Nanda, V.P. et al (eds.), *Global Human Rights: Public Policies, Comparative Measures and NGO Strategies.* Boulder, Co.: Westview Press.

Scully, G.W. and Slottje, D.J. (1991), "Ranking Economic Liberty Across Countries", *Public Choice*, Vol. 69, No. 2, 121-152.

Schmitz, G.J. and Gilles, D. (1992), *The Challenge of Democratic Development: Sustaining Democratization In Developing Societies.* Ottawa: North-South Institute.

Sen, Amartya. (1990), "Development as Capability Expansion" in Griffin, K. and Knight, J. (eds.). *Human Development and the International Development Strategy for the 1990s.* London: Macmillan.

Seers, Dudley. (1972), "What Are We Trying To Measure?" in *Journal of Development Studies*, 8, 21-35.

Shannon, L.W. (1957), "Is the Level of Development Related to Capacity for Self-Government?", *American Journal of Economics and Sociology*, 17, 367-381.

Sheehan, G. and Hopkins, M. (1979), *Basic Needs Performance.* Geneva: ILO.

Shin, Doh C. and Snyder, Wayne. (1983), "Economic Growth, Quality of Life, and Development Policy: A Case Study of South Korea", *Comparative Political Studies*, Vol. 16, No. 2, 195-213.

Shin, Kwang Yeong. (1998), "The Political Economy of Economic Growth in East Asia: South Korea and Taiwan" in Kim, Eun Mee (ed.) *Four Asian Tigers: Economic Development and the Global Political Economy.* San Diego: Academic Press.

Sirowy, Larry and Inkeles, Alex. (1990), "The Effects of Democracy on Economic Growth and Inequality: A Review", *Studies in Comparative International Development*, Vol. 25, No. 1, 126-157.

Sloan, John and Tedin, Kent L. (1987), "The Consequences of Regime Type for Public-Policy Outputs", *Comparative Political Studies*, Vol. 20, No. 1, 98-124.

Slottje, D.J. et al. (1991), *Measuring the Quality of Life Across Countries.* Boulder, Co: Westview Press.

Smith, B.C. (1996), *Understanding Third World Politics: Theories of Political Change and Development.* London: Macmillan.

Solomon, Erwin S. et al. (1980), "UNESCO's Policy-Relevant Quality of Life Research Program" in Szalai, A. et al (eds.), *The Quality of Life*. London: SAGE.

Somjee, A.H. (1986), *Parallels and Actuals of Political Development*. London: Macmillan.

Sorensen, G. (1993a), *Political Conditionality*. London: Frank Cass.

----- (1993b), *Democracy and Democratization*. Boulder, CO: Westview Press.

Stedman, John S. (ed.) (1993), *Botswana: The Political Economy of Democratic Development*. Boulder, Co: Lynne Rienner.

Streeten, Paul. (1979),"Basic Needs: Premises and Promises", *Journal of Policy Modeling*, 1, 136-146.

----- (1981a), *Development Perspectives*. London: Macmillan.

----- (1981b), *First Things First*. New York: OUP.

----- (1984), "Basic Needs: Some Unsettled Questions", *World Development*, Vol. 12, No. 9, 973-978.

----- (1992), *Global Governance for Human Development*. New York: Human Development Report Office (United Nations).

Streeten, Paul and Burki, Shavid J. (1978), "Basic Needs: Some Issues", *World Development*, Vol. 6, No. 3, 411-421.

Stewart, F. (1985), *Planning to Meet Basic Needs*. London: Macmillan.

Sullivan, Michael, J. (1991), *Measuring Global Values: The Ranking of 162 Countries*. London: Greenwood Press.

Taylor, C.L. (1972), "Indicators of Political Development", *Journal of Development Studies*, 8, April.

Taylor, C.L. and Jodice, D.A. (1983), *World Handbook of Political and Social Indicators*, Vol. 2, 3rd Ed.. New Haven: Yale University Press.

Todaro, M.P. (1989), *Economic Development in the Third World (4th ed.)*. London: Longman.

Tomasevski, Katarina. (1991), "A Critique of the UNDP Political Freedom Index 1991", *Human Rights in Developing Countries Yearbook*, 3-24.

UNDP. (1990), *Human Development Report 1990*. New York: OUP.

----- (1991), *Human Development Report 1991*. New York: OUP.

----- (1992), *Human Development Report 1992*. New York: OUP.

----- (1993), *Human Development Report 1993*. New York: OUP.

----- (1994), *Human Development Report 1994*. New York: OUP.

----- (1995), *Human Development Report 1995*. New York: OUP.

----- (1996), *Human Development Report 1996*. New York: OUP.

----- (1997), *Human Development Report 1997*. New York: OUP.

----- (1998), *Human Development Report 1998*. New York: OUP.

----- (1999), *Human Development Report 1999*. New York: OUP.

UNESCO. (1976b), *The Use of Socio-Economic Indicators in Development Planning*. Paris: UNESCO.

----- (1983b), *Quality of Life: Problems of Assessment and Measurement*. Geneva: UNESCO.

Urban, George R. (ed.). (1988), *Social and Economic Rights in the Soviet Bloc*. New Brunswick, NJ: Transaction Books.

Van de Walle, Dominique. (1995), *Public Spending and the Poor*. Washington: The World Bank, Policy Research Working Paper 1476.

Vandewalle, Dirk. (1992), "Ben Ali's New Era: Pluralism and Economic Privatization in Tunisia" in Barkey, H.J. (ed.), *The Politics of Economic Reform in the Middle East*. New York: St. Martin's Press.

Vanhanen, Tatu. (1984), *Emergence of Democracy: A Comparative Study of 119 States, 1850-1979*. Helsinki: Societas Scientiarum Fennica.

----- (1990), *The Process of Democratization: A Comparative Study of 147 States, 1980-88*. New York: Crane Russak.

----- (1992), *Strategies of Democratization*. Washington: Crane Russak.

Vanssay, Xavier De and Spindler, Z.A. (1994), "Freedom and Growth: Do Constitutions Matter?", *Public Choice*, Vol. 78, Nos. 3-4.

Verwayen, Henri. (1980), "The Specification and Measurement of the Quality of Life in OECD Countries" in Szalai, A. et al, *The Quality of Life*. London: SAGE.

Vorhes, Frank and Glahe, Fred. (1988), "Political Liberty and Social Development: An Empirical Investigation", *Public Choice*, 58, 45-71.

Vorys, K.V. (1965), "Toward a Concept of Political Development", *Annals of the American Academy of Political and Social Science*, 358, 14-20.

Wade, Robert. (1990), *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization.* Princeton: Princeton University Press.

Watt, E.D. (1982), "Human Needs, Human Wants, and Political Consequences", *Political Studies*, 30, 533-543.

Weede, Erich. (1983), "The Impact of Democracy on Economic Growth: Some Evidence from Cross-National Analysis", *Kyklos*, Vol. 36, 21-39.

----- (1990), "Democracy, Regime Repressiveness and Economic Growth, 1973-1983: A Cross-National Analysis", *International Review of Sociology*, I, 5-30.

----- (1993), "The Impact of Democracy or Repressiveness on the Quality of Life, Income Distribution, and Economic Growth Rates", *International Sociology*, Vol. 8, No. 2, 177-195.

Weigel, Van B. (1986), "The Basic Needs Approach: Overcoming the Poverty of Homo Oeconomicus", *World Development*, Vol. 14, No. 12, 1423-1434.

----- (1989), *A Unified Theory of Development.* New York: Praeger.

White, Gordon. (1984), "Developmental States and Socialist Industrialization in the Third World", *Journal of Development Studies*, 21(1), 97-120.

----- (1998), "Constructing a Democratic Developmental State" in Robinson, Mark and White, G. (eds.). *The Democratic Developmental State.* New York: OUP.

Wiarda, Howard J. (1985a), "Comparative Politics Past and Present" in Wiarda (ed.), *New Directions in Comparative Politics.* Boulder CO: Western Press.

------ (1985b), "Toward a Nonethnocentric Theory of Development: Alternative Conceptions from the Third World" in Wiarda, H.J. (ed.), *New Directions in Comparative Politics.* Boulder CO: Western Press.

Williamson, John B. and Pampel, Fred C. (1986), "Politics, Class and Growth in Social Security Effort: A Cross-National Analysis", *International Journal of Comparative Sociology*, XXVII, 1-2, 15-27.

Williamson, John B. (1987), "Social Security and Physical Quality of Life in Developing Nations: A Cross-National Analysis", *Social Indicators Research*, 19, 205-227.

Wokler, Robert. (1994), "Democracy's Mythical Ordeals" in Parry, Geraint and Moran, M. (eds.), *Democracy and Democratization.* London: Routledge.

World Bank, (1983a), *World Development Report 1983*, New York: OUP.

----- (1983b), *Focus on World Poverty.* Washington: World Bank.

----- (1987a), *World Development Report 1987*, New York: OUP.

----- (1990a), *World Development Report 1990*, New York: OUP.

----- (1991a), *World Development Report 1991*, New York: OUP.

----- (1994a), *World Development Report 1994*, New York: OUP.

----- (1997), *World Development Report 1997*, New York: OUP.

Zapf, Wolfgang. (1980), "The SPES Social Indicators System In Comparative Perspective" in Szalai, A. et al (eds.), *The Quality of Life*. London: SAGE.

Zarate, Juan Carlos. (1994), *Forging Democracy: A Comparative Study of the Effects of U.S. Foreign Policy on Central American Democratization.* Lanham MD: University Press of America.

Zartman, I. William (ed.). (1991), *Tunisia: The Political Economy of Reform.* Boulder, Co: Lynne Rienner.

Statistical Bibliography

Banks, Arthur. (1971), *Cross-Polity Time-Series Data.* Cambridge, MA: MIT Press.

Cioffi-Revilla, Claudio. (1989), *The Scientific Measurement of International Conflict: Handbook of Data Sets on Crises and Wars, 1495-1988.* Boulder CO: Lynne Rienner.

Degenhardt, H.W. (1983), *Political Dissent: An International Guide to Dissent, Extra-Parliamentary, Guerilla and Illegal Movements.* Harlow: Longman.

----- (1988) (ed.), *Revolutionary and Dissident Movements: An International Guide (2nd Ed.).* Harlow: Longman.

FAO. (1976), *The State of Food and Agriculture.* Rome: FAO.

----- (1981), *The State of Food and Agriculture.* Rome: FAO.

----- (1982), *The State of Food and Agriculture.* Rome: FAO.

----- (1986), *The State of Food and Agriculture.* Rome: FAO.

----- (1992), *The State of Food and Agriculture.* Rome: FAO.

----- (1996), *The State of Food and Agriculture.* Rome: FAO.

Gastil, Raymond D. (1979), *Freedom in the World: Political Rights and Civil Liberties 1979.* New York: Freedom House.

----- (1980), *Freedom in the World: Political Rights and Civil Liberties 1980.* New York: Freedom House.

----- (1981), *Freedom in the World: Political Rights and Civil Liberties 1981.* New York: Freedom House.

----- (1982), *Freedom in the World: Political Rights and Civil Liberties 1982.* New York: Freedom House.

----- (1983), *Freedom in the World: Political Rights and Civil Liberties 1983.* New York: Freedom House.

----- (1984), *Freedom in the World: Political Rights and Civil Liberties 1983-84.* New York: Freedom House.

----- (1985), *Freedom in the World: Political Rights and Civil Liberties 1984-85.* New York: Freedom House.

----- (1986), *Freedom in the World: Political Rights and Civil Liberties 1985-86.* New York: Freedom House.

----- (1987), *Freedom in the World: Political Rights and Civil Liberties 1986-87.* New York: Freedom House.

----- (1988), *Freedom in the World: Political Rights and Civil Liberties 1987-88.* New York: Freedom House.

----- (1989), *Freedom in the World: Political Rights and Civil Liberties 1988-89.* New York: Freedom House.

----- (1990), *Freedom in the World: Political Rights and Civil Liberties 1989-90.* New York: Freedom House.

----- (1991), *Freedom in the World: Political Rights and Civil Liberties 1991.* New York: Freedom House.

----- (1999) *Freedom in the World: Political Rights and Civil Liberties 1998-99.* New York: Freedom House.

ILO. (1984), *Yearbook of Labour Statistics.* Geneva: ILO.

----- (1985), *Yearbook of Labour Statistics.* Geneva: ILO.

----- (1985b), *Yearbook of Labour Statistics.* Geneva: ILO.

----- (1986), *Yearbook of Labour Statistics.* Geneva: ILO.

----- (1992), *Yearbook of Labour Statistics.* Geneva: ILO.

----- (1993a), *Yearbook of Labour Statistics.* Geneva: ILO.

----- (1993b), *World Labour Report.* Geneva: ILO.

----- (1993c), *The Incidence of Poverty in Developing Countries: An ILO Compendium of Data.* Geneva: ILO.

----- (1994a), *Yearbook of Labour Statistics.* Geneva: ILO.

----- (1994b), *World Labour Report.* Geneva: ILO.

IMF. (1983), *International Financial Statistics Yearbook.* Washington: IMF.

----- (1986a), *Government Finance Statistics Yearbook.* Washington DC: IMF.

----- (1986b), *International Financial Statistics Yearbook.* Washington: IMF.

----- (1988a), *Government Finance Statistics Yearbook.* Washington DC: IMF.

----- (1988b), *International Financial Statistics Yearbook.* Washington: IMF.

----- (1991), *Government Finance Statistics Yearbook.* Washington DC: IMF.

----- (1993), *Government Finance Statistics Yearbook.* Washington DC: IMF.

----- (1996), *Government Finance Statistics Yearbook.* Washington DC: IMF.

Lindauer, David L. (1988), *The Size and Growth of Government Spending.* Washington: The World Bank.

Mitchell, B. R. (1981), *European Historical Statistics, 1750-1975.* London: Macmillan.

Muller, G. (1989), *Comparative World Data: A Statistical Handbook for Social Science.* Baltimore: Johns Hopkins Universtity Press.

Russett, Bruce M. et al (eds.). (1964), *World Handbook of Political and Social Indicators.* New Haven: Yale University Press.

Shoup, Paul S. (1981), *The East European and Soviet Data Handbook: Political, Social and Developmental Indicators, 1945-75.* New York: Columbia University Press.

SIPRI. (1987), *Yearbook of World Armament, Disarmament and International Security.* London: OUP.

----- (1988), *Yearbook of World Armament, Disarmament and International Security.* London: OUP.

----- (1989), *Yearbook of World Armament, Disarmament and International Security.* London: OUP.

----- (1990), *Yearbook of World Armament, Disarmament and International Security.* London: OUP.

----- (1991), *Yearbook of World Armament, Disarmament and International Security.* London: OUP.

----- (1992), *Yearbook of World Armament, Disarmament and International Security.* London: OUP.

----- (1993), *Yearbook of World Armament, Disarmament and International Security.* London: OUP.

----- (1994), *Yearbook of World Armament, Disarmament and International Security.* London: OUP.

Sivard, Ruth. (1982), *World Military and Social Expenditures 1982.* Washington DC: World Priorities.

----- (1985), *World Military and Social Expenditures 1982.* Washington DC: World Priorities.

----- (1991), *World Military and Social Expenditures 1982.* Washington DC: World Priorities.

Small, M. and Singer, J.D. (1982), *Resort to Arms: International and Civil Wars, 1816-1980*. Beverly Hills: Sage.

Sullivan, Michael, J. (1991), *Measuring Global Values: The Ranking of 162 Countries*. London: Greenwood Press.

Summers, R. and Heston, A. (1984), "Improved International Comparisons of Real Product and Its Composition, 1950-80", *Review of Income and Wealth*, No.2 (June), 240-262.

----- (1988), "A New Set of International Comparisons of Real Product and Price Levels Estimates for 130 Countries, 1950-1985", *Review of Income and Wealth*, March (1).

----- (1991), "The Penn World Tables (Mark 5): An Expanded Set of International Comparisons, 1950-88", *Quarterly Journal of Economics*, Vol. 16, May (2).

Tait, A.A. and Heller, P.S. (1982), *International Comparisons of Government Expenditure*, Occasional Paper No. 10. Washington, DC: IMF.

Taylor, Charles L. et al (eds.). (1972), *World Handbook of Political and Social Indicators (3rd ed.)*. New Haven: Yale University Press.

Taylor, Charles L. and Jodice, David A. (1983), *World Handbook of Political and Social Indicators (3rd ed.)*. New Haven: Yale University Press.

UN. (1967), *Statistical Yearbook 1967*. New York: United Nations.

----- (1971), *Statistical Yearbook 1971*. New York: United Nations.

----- (1977), *Compendium of Social Statistics*. New York: United Nations.

----- (1979), *Demographic Yearbook*. New York: United Nations.

----- (1980a), *Statistical Yearbook 1979-80*. New York: United Nations.

----- (1980b), *Statistical Yearbook for Asia and the Pacific*. Bangkok: UN ESCAP.

----- (1981a), *Statistical Yearbook 1981*. New York: United Nations.

----- (1981b), *Statistical Yearbook for Asia and the Pacific*. Bangkok: UN ESCAP.

----- (1984a), *Statistical Yearbook 1983-84*. New York: United Nations.

----- (1984b), *Statistical Yearbook for Latin America and the Caribbean*. New York: ECLAC.

----- (1985), *National Accounts Statistics: Compendium of Income Distribution Statistics*. New York: United Nations.

----- (1988), *Compendium of Social Statistics*. New York: United Nations.

----- (1989), *Statistical Yearbook for Latin America and the Caribbean.* New York: ECLAC.

----- (1990), *Statistical Yearbook for Latin America and the Caribbean.* New York: ECLAC.

----- (1991a), *Statistical Yearbook 1990-91.* New York: United Nations.

----- (1991b), *African Socio-Economic Indicators 1990-91.* Addis Ababa: UN Economic Commission for Africa.

----- (1991c), *Statistical Yearbook for Asia and the Pacific.* Bangkok: UN ESCAP.

----- (1991d), *Statistical Yearbook for Latin America and the Caribbean.* New York: ECLAC.

----- (1992), *Statistical Yearbook for Latin America and the Caribbean.* New York: ECLAC.

----- (1993a), *Trends in International Distribution of Gross World Product.* New York: United Nations.

----- (1993b), *Statistical Yearbook for Asia and the Pacific.* Bangkok: UN ESCAP.

----- (1993c), *Demographic Yearbook.* New York: United Nations.

UNDP. (1990), *Human Development Report 1990.* New York: OUP.

----- (1991), *Human Development Report 1991.* New York: OUP.

----- (1992), *Human Development Report 1992.* New York: OUP.

----- (1993), *Human Development Report 1993.* New York: OUP.

----- (1994), *Human Development Report 1994.* New York: OUP.

----- (1995), *Human Development Report 1995.* New York: OUP.

----- (1996), *Human Development Report 1996.* New York: OUP.

----- (1997), *Human Development Report 1997.* New York: OUP.

----- (1998), *Human Development Report 1998.* New York: OUP.

----- (1999), *Human Development Report 1999.* New York: OUP.

UNESCO. (1970), *Statistical Yearbook 1970.* Paris: UNESCO.

----- (1975), *Statistical Yearbook 1975.* Paris: UNESCO.

----- (1976), *Statistical Yearbook 1976.* Paris: UNESCO.

----- (1977), *Statistical Yearbook 1977*. Paris: UNESCO.

----- (1980), *Statistical Yearbook 1980*. Paris: UNESCO.

----- (1981), *Statistical Yearbook 1981*. Paris: UNESCO.

----- (1982), *Statistical Yearbook 1982*. Paris: UNESCO.

----- (1983), *Statistical Yearbook 1983*. Paris: UNESCO.

----- (1984), *Statistical Yearbook 1984*. Paris: UNESCO.

----- (1986), *Statistical Yearbook 1986*. Paris: UNESCO.

----- (1990), *Compendium of Statistics on Illiteracy*. Paris: UNESCO.

----- (1991), *World Education Report*. Paris: UNESCO.

----- (1992), *Statistical Yearbook 1992*. Paris: UNESCO.

----- (1993a), *Statistical Yearbook 1993*. Paris: UNESCO.

----- (1993b), *World Education Report*. Paris: UNESCO.

----- (1993c), *Statistics of Educational Attainment and Illiteracy, 1970-80*. Paris: UNESCO.

----- (1994), *Statistical Yearbook 1994*. Paris: UNESCO.

----- (1996), *Statistical Yearbook 1996*. Paris: UNESCO.

UNICEF. (1981), *State of the World's Children 1981*. London: OUP.

----- (1982), *State of the World's Children 1982*. London: OUP.

----- (1984), *State of the World's Children 1984*. London: OUP.

----- (1986), *State of the World's Children 1986*. London: OUP.

----- (1987), *State of the World's Children 1987*. London: OUP.

----- (1989), *State of the World's Children 1989*. London: OUP.

----- (1991a), *State of the World's Children 1991*. London: OUP.

----- (1991b), *Statistics on Children in UNICEF Assisted Countries*. New York: UNICEF.

----- (1995), *State of the World's Children 1995*. London: OUP.

Vanhanen, Tatu. (1984), *Emergence of Democracy: A Comparative Study of 119 States, 1850-1979*. Helsinki: Societas Scientiarum Fennica.

----- (1990), *The Process of Democratization: A Comparative Study of 147 States, 1980-88*. New York: Crane Russak.

WHO. (1986), *World Health Statistics Annual 1986*. Geneva: WHO.

----- (1991), *World Health Statistics Annual 1991*. Geneva: WHO.

World Bank.(1972), *World Tables*. Baltimore: Johns Hopkins Univ. Press.

----- (1980), *World Tables*. Baltimore: Johns Hopkins Univ. Press.

----- (1983), *World Development Report 1983*. New York: OUP.

----- (1984), *World Development Report 1984*. New York: OUP.

----- (1985), *World Development Report 1985*. New York: OUP.

----- (1986), *World Development Report 1986*. New York: OUP.

----- (1987a), *World Development Report 1987*. New York: OUP.

----- (1987b), *World Tables*. Baltimore: Johns Hopkins Univ. Press.

----- (1988a), *World Development Report 1988*. New York: OUP.

----- (1988b), *Social Indicators of Development*. Washington, DC: World Bank.

----- (1989a), *World Development Report 1989*. New York: OUP.

----- (1989b), *Social Indicators of Development*. Washington, DC: World Bank.

----- (1989c), *Trends in Developing Economies*. Washington DC: World Bank.

----- (1990a), *World Development Report 1990*. New York: OUP.

----- (1990b), *Trends in Developing Economies*. Washington DC: World Bank.

----- (1991a), *World Development Report 1991*. New York: OUP.

----- (1991b), *Trends in Developing Economies*. Washington DC: World Bank.

----- (1991c), *World Tables*. Baltimore: Johns Hopkins Univ. Press.

----- (1992a), *World Development Report 1992*. New York: OUP.

----- (1992b), *Trends in Developing Economies*. Washington DC: World Bank.

----- (1992c), *World Tables*. Baltimore: Johns Hopkins Univ. Press.

----- (1993), *World Development Report 1993*. New York: OUP.

----- (1994a), *World Development Report 1994*. New York: OUP.

----- (1994b), *Social Indicators of Development*. Washington, DC: World Bank.

----- (1994c), *World Tables*. Baltimore: Johns Hopkins Univ. Press.

----- (1995), *World Development Report 1995*. New York: OUP.

----- (1996), *African Development Indicators*. Washington, DC: World Bank.

----- (1997), *World Development Report 1997*. New York: OUP.

----- (1999), *World Development Report 1999*. New York: OUP.